DO NOT PLACE IN CASH BOX

United States Patent [19]

Sturdevant et al.

[11] **Patent Number: 4,558,208**

[45] **Date of Patent: Dec. 10, 1985**

[54] **HEATING STRUCTURE FOR AN OVEN**

[75] Inventors: Eugene J. Sturdevant, Wilmington, Del.; John F. Daniels, Paoli, Pa.

[73] Assignee: Harry Hill Associates, Philadelphia, Pa.

[21] Appl. No.: 493,936

[22] Filed: May 12, 1983

[51] Int. Cl.[4] H01T 19/04

[52] U.S. Cl. 219/399; 165/96; 361/229; 250/326; 219/402; 219/404

[58] Field of Search ..... 219/399, 392, 402, 404, 219/10.81, 391, 394, 395, 396, 397, 398, 403, 280, 281; 165/1, 96; 174/16 R; 361/229, 230; 264/22, 25, 26, 27; 250/324, 325, 326; 422/186.04; 425/174.4, 174.6, 174.8 E, 174.8 R

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U.S. PATENT DOCUMENTS

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3,526,268	9/1970	Robinson	219/391
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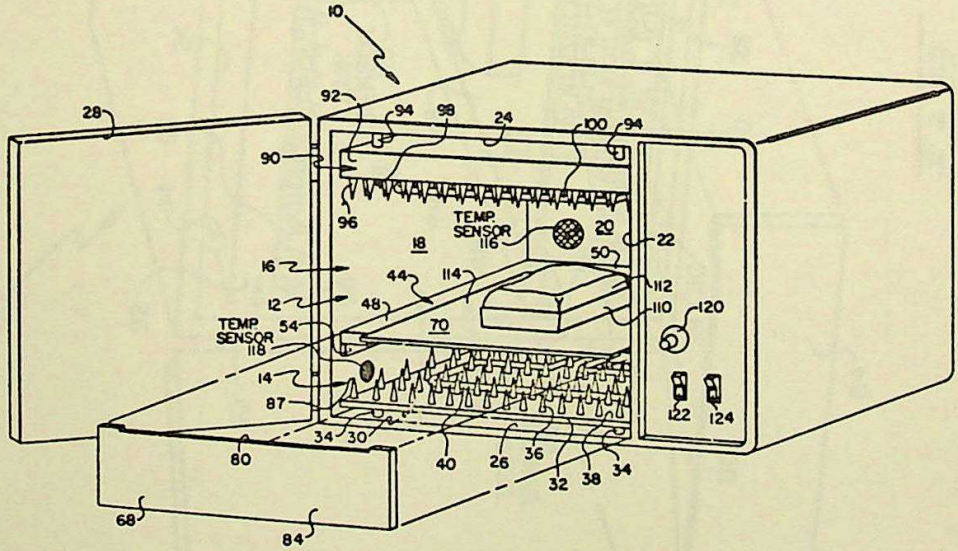
4,092,390	5/1978	Mulvany	425/174.4
4,238,668	12/1980	Mammen	165/96

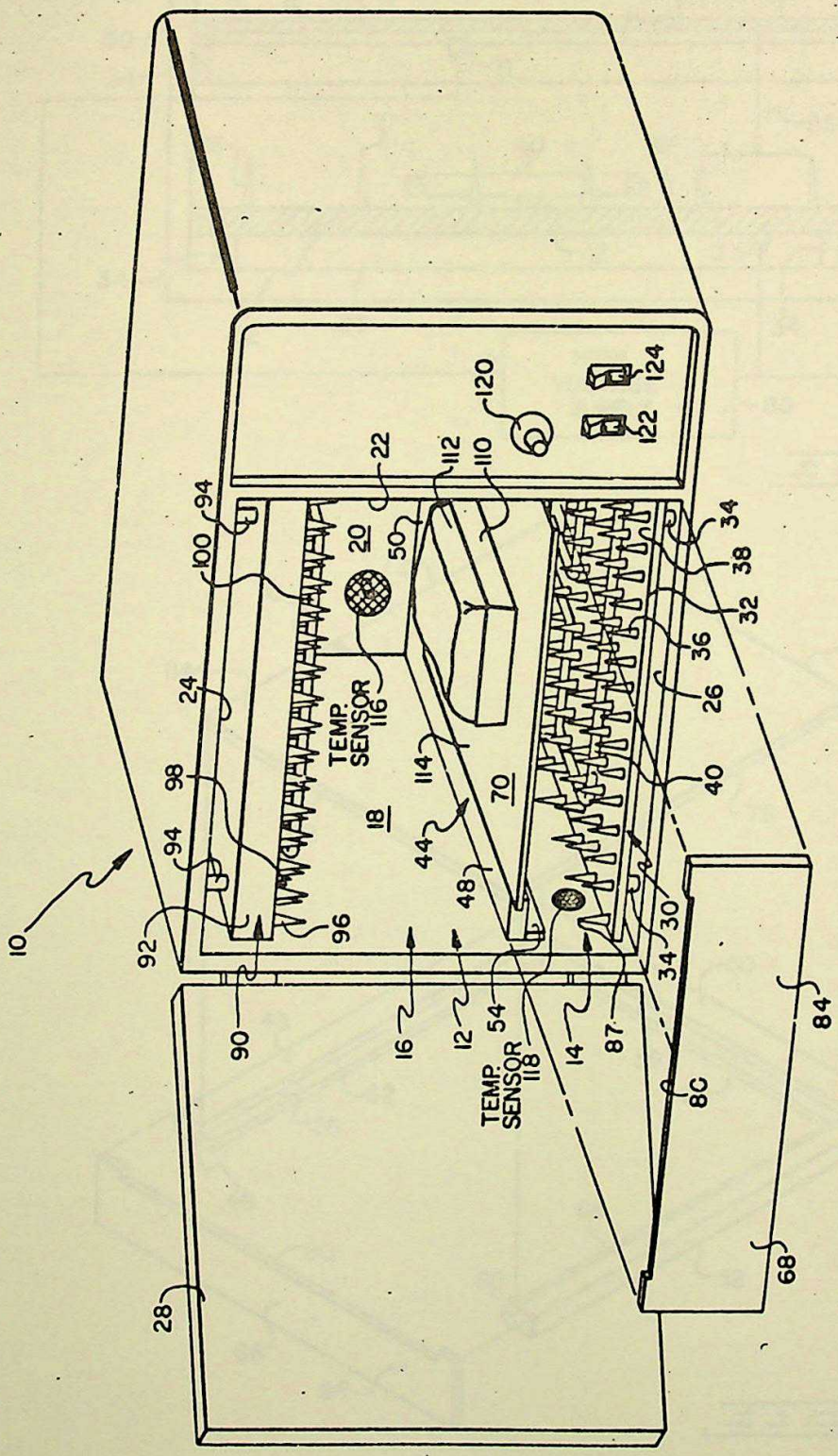
Primary Examiner—C. L. Albritton
Assistant Examiner—Teresa J. Walberg
Attorney, Agent, or Firm—Dann, Dorfman, Herrell and Skillman

[57] **ABSTRACT**

A cooking oven has an enhanced heating structure for decreasing the cooking time relative to conventional ovens. The enhanced heating structure located on the bottom of the oven has a plurality of spaced apart upward projecting needle electrodes and a heater element located adjacent the needle electrodes. A frame and a flat plate form an enclosure of selected volume for enclosing the needle electrodes and the heater element. The flat plate supports the food for cooking and provides safety and ease of cleaning for the user. An electrical circuit generates a high voltage between the flat plate and the needle electrodes for increasing the rate of heat transfer from the heater element to the flat plate. The temperature of the selected volume enclosed is separately monitored and independently controlled.

10 Claims, 5 Drawing Figures

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TEMP. SENSOR 116
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TEMP. SENSOR 118
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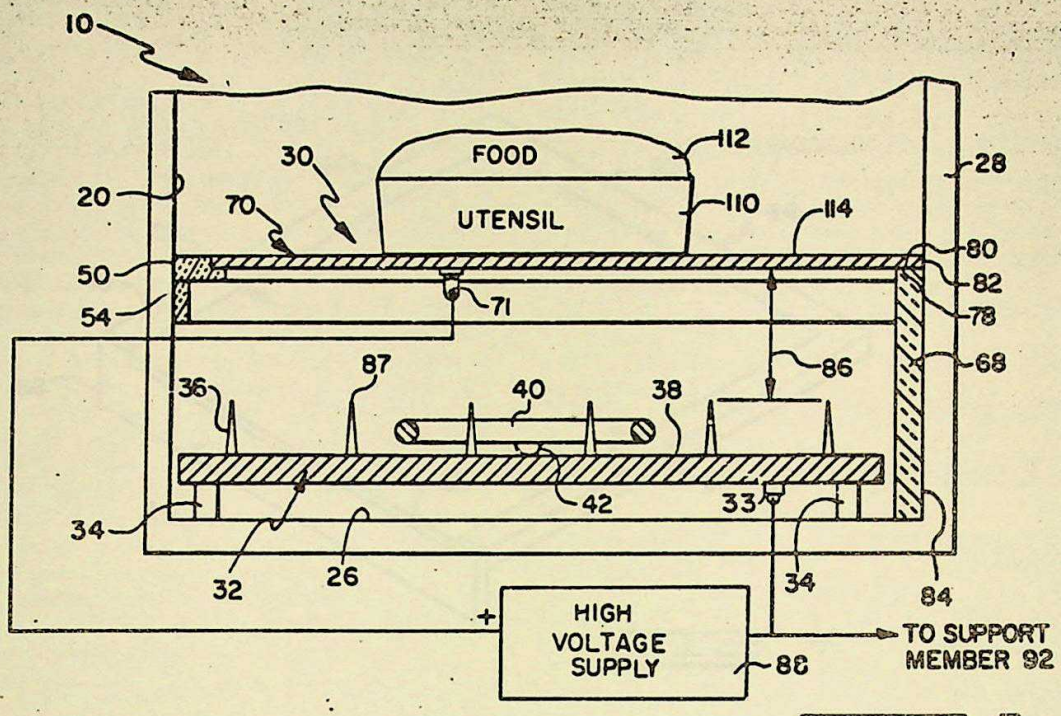
FIG 1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FOOD
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UTENSIL
110
114
80
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82
54
71
78
86
68
87
36
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42
33
34
32
26
34
84
HIGH
VOLTAGE
SUPPLY
88
TO SUPPORT
MEMBER 92

FIG 2

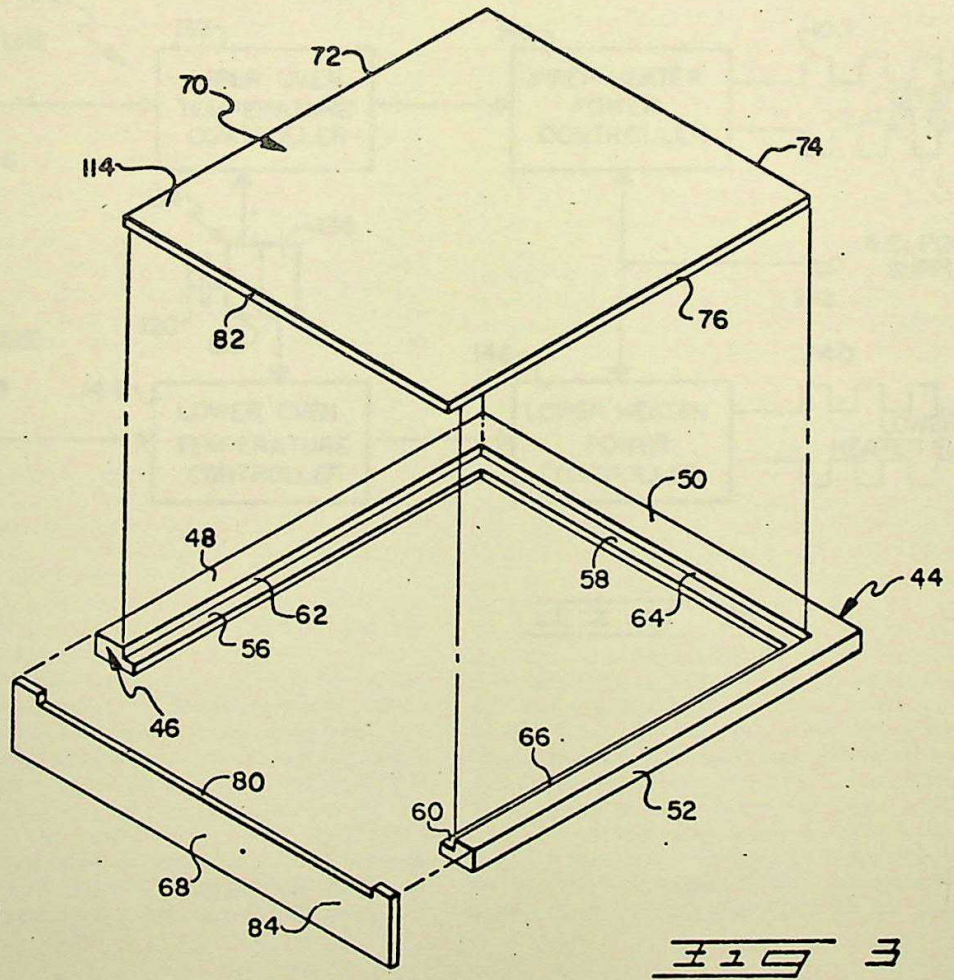
72
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FIG 3

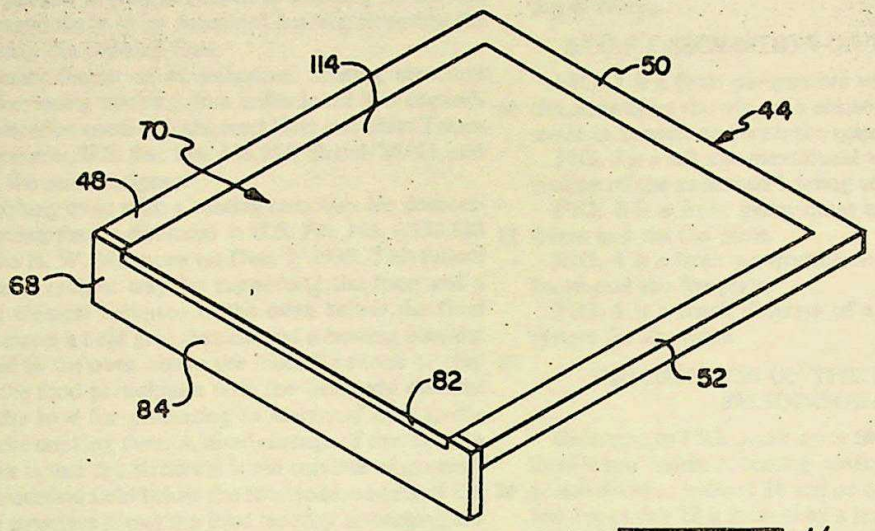
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Fig 4

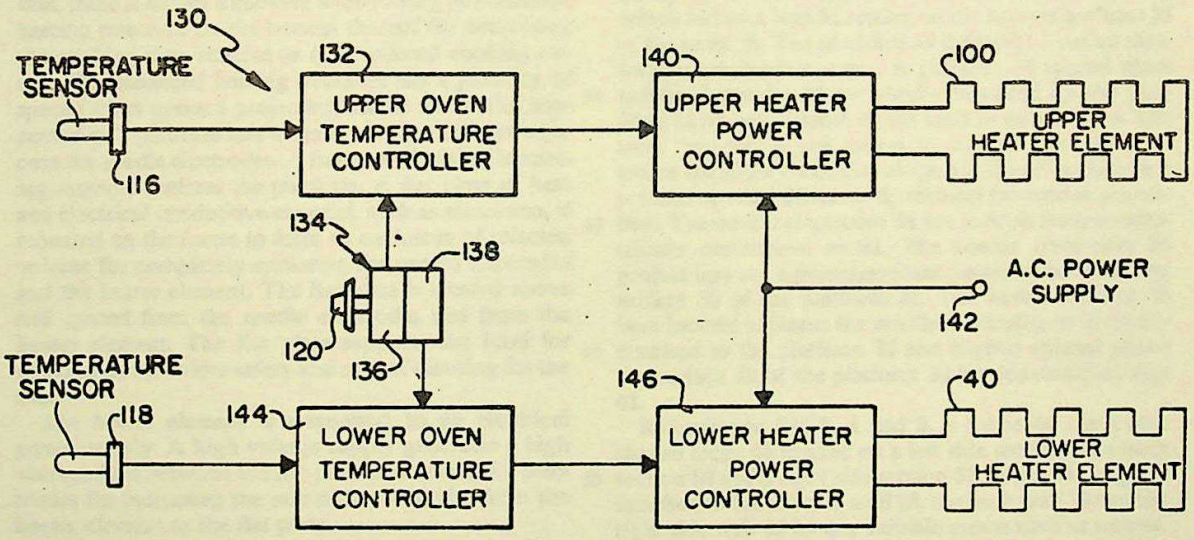

130
TEMPERATURE SENSOR
116
132
UPPER OVEN TEMPERATURE CONTROLLER
140
UPPER HEATER POWER CONTROLLER
100
UPPER HEATER ELEMENT
134
138
120
136
A.C. POWER SUPPLY
142
TEMPERATURE SENSOR
118
144
LOWER OVEN TEMPERATURE CONTROLLER
146
LOWER HEATER POWER CONTROLLER
40
LOWER HEATER ELEMENT

Fig 5

HEATING STRUCTURE FOR AN OVEN

BACKGROUND OF THE INVENTION

The present invention relates to cooking ovens and more particularly to an enhanced heating structure for decreasing the cooking time.

An embodiment of an enhanced heating structure from decreasing cooking time is disclosed in a copending application entitled Enhanced Heat and Mass Transfer Apparatus, U.S. Ser. No. 448,556, filed 4/25/83, and having the same assignee.

A cooking oven with a heating structure for decreasing cooking time is disclosed in U.S. Pat. No. 4,238,688 issued to H. W. Mammen on Dec. 9, 1980. This patent discloses a rack or tray for supporting the food and a heating element mounted in the oven below the food and discloses a field grid element and a heating element mounted in the oven above the food. The rack or tray below the food participates with the field grid element above the food for generating an electrical field to decrease the cooking time. A disadvantage of this heating structure is that this structure is not capable of generating an electrical field below the food independent of the heating structure above the food thereby restricting the decreased cooking time.

SUMMARY OF THE INVENTION

In the illustrated embodiment of the present invention, there is shown a cooking oven having an enhanced heating structure on the bottom thereof for decreasing the cooking time relative to conventional cooking ovens. The enhanced heating structure has a plurality of spaced apart upward projecting needle electrodes supported on a platform and a heater element located adjacent the needle electrodes. A frame of electrical insulating material outlines the platform. A flat plate of heat and electrical conductive material, such as aluminum, is mounted on the frame to form an enclosure of selected volume for completely enclosing the needle electrodes and the heater element. The flat plate is located above and spaced from the needle electrodes and from the heater element. The flat plate supports the food for cooking and provides safety and ease of cleaning for the user.

The heater element is connected to an electrical power supply. A high voltage supply generates a high voltage field between the flat plate and the needle electrodes for increasing the rate of heat transfer from the heater element to the flat plate.

Accordingly, an object of the present invention is to provide an oven with an enhanced heating structure for decreasing cooking time.

Another object of the present invention is to provide an oven with an enhanced heating structure having a flat plate located above the needle electrodes to prevent the needle electrodes from injuring the user, to prevent the user from damaging the needle electrodes, and to provide a cooking surface which is easy to clean.

Another object of the present invention is to provide an independent temperature control for maintaining a desired temperature in the selected volume of the enhanced heating structure.

Another object of the present invention is to provide an oven with an enhanced heating structure below the food to cooperate with a heating structure above the food for heating the food substantially uniformly over its entire surface.

Other objects, features and advantages of the invention will become more apparent from the following description, including appended claims and accompanying drawing.

BRIEF DESCRIPTION OF THE DRAWING

FIG. 1 is a front perspective view of the oven with the door open showing the enhanced heating structure made in accordance with the present invention.

FIG. 2 is a left side elevational view partially in cross section of the enhanced heating structure.

FIG. 3 is a front perspective exploded view of the frame and the flat plate.

FIG. 4 is a front perspective assembled view of the frame and the flat plate.

FIG. 5 is a block diagram of a temperature control system for the oven.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to FIG. 1, the oven 10 is designed to accept food items inside a heating cavity 12 comprised of a selected lower volume 14 and an upper volume 16. The heating cavity 12 is formed by a left side wall 18, a back wall 20, a right side wall 22, a top surface 24, a bottom surface 26 and a hinged door 28.

Referring to FIGS. 1 and 2, a lower enhanced heating structure 30 forms the lower volume 14 of the heating cavity 12. The heating structure 30 has a platform 32 which includes legs 34 resting on the bottom surfaces 26 of the oven 10. The platform 32 is formed from an electrically conductive metal. A plurality of spaced apart needle electrodes 36 are rigidly mounted on the platform 32 by any suitable means such as an adhesive. The term "needle" is not means to suggest that the electrodes require a particular shape but that they require a pointed or small diameter tip suitable for corona generation. The needle electrodes 36 are formed from an electrically conductive metal. The needle electrodes 36 project upward a predetermined distance above the top surface 38 of the platform 32. The heater element 40 here located adjacent the needle electrodes 36 is rigidly attached to the platform 32 and slightly spaced above the surface 38 of the platform 32 by conventional legs 42.

Referring to FIGS. 1 and 3, a frame 44 has a step shaped ledge 46 formed on a left side section 48, a back section 50 and a right side section 52. A bar 54 is rigidly attached to the left side wall 18, the back wall 20 and the right side wall 22 by any suitable means such as screws. The bar 54 supports the frame 44 in the oven 10. The bar 54 is made from non-electrically conductive material such as ceramic. The ledge 46 has support surfaces 56, 58 and 60 on the respective sections 48, 50 and 52. The ledge 46 also has abutment walls 62, 64 and 66 on the respective sections 48, 50, and 52. The frame 44 includes a front wall 68 removably attached to the left side section 48 and to the right side section 52 by any suitable means such as screws. Alternatively, the frame 44 could be made from one solid piece such as a casting.

A flat plate 70 is mounted on the support surfaces 56, 58 and 60 and has three peripheral edges 72, 74 and 76 abutting against corresponding abutment walls 62, 64 and 66. A bottom surface 78 (FIG. 2) along the front of the flat plate 70 is supported on a top surface 80 of the front wall 68. A front edge 82 of the flat plate 70 is

substantially flush with an outside surface 84 of the front wall 68. The flat plate 70 is rigidly attached to the frame 44 by any suitable means such as by screws (none shown). Alternatively, the flat plate 70 could be non-rigidly seated on the frame 44 and thereby could be readily removed for cleaning and replacement purposes. When the flat plate 70 is mounted on the frame 44, the flat plate 70 is located above and spaced from the needle electrodes 36 a predetermined distance indicated by line 86 extending between the free ends 87 of the electrodes 36 and the flat plate 70.

The frame 44 is made from a non-electrically conductive material such as ceramic. The flat plate 70 is made from an electrically conductive material such as aluminum. A high voltage supply 88 is electrically connected to the flat plate 70 by a connector 71. The other terminal of voltage supply 88 is preferably grounded and connected by connector 33 to conductive platform 32 to complete the circuit. A similar connection is made to support member 92. The frame 44 completely electrically isolates the flat plate 70 from the oven 10. The combination of the frame 44 and the flat plate 70 completely encloses the plurality of needle electrodes 36 and the heater element 40. The resulting enclosure forms the selected lower volume 14 and the remaining area of the cavity 12 becomes the upper volume 16.

Referring again to FIG. 1, an upper heating structure 90 is mounted in the upper volume 16 of the cavity 12. The heating structure 90 has a support member 92 attached either to the top surface 24 of the oven 10 by posts 94 or to a drive mechanism mounted on the oven which may move the upper heating structure 90 vertically as disclosed in the previously mentioned copending application. A plurality of spaced apart needle electrodes 96 are rigidly attached to the support member 92 by any suitable means such as by an adhesive. The support member 92 and the needle electrodes 96 are formed from an electrically conductive metal. The needle electrodes 96 project downward a predetermined distance from the lower surface 98 of the support member 92. The heater element here 100 located adjacent the needle electrodes 96 is rigidly attached to the support member 92 and slightly spaced below the surface 98 of the support member 92.

A utensil 110 carrying food 112 is conveniently and safely placed in the oven 10 by placing the utensil 110 on a top surface 114 of the flat plate 70. The enhanced heating structure 30 is located below the food 112 and the upper heating structure 90 is located above the food 112.

Referring to FIG. 1, an upper temperature sensor 116 is mounted in the back wall 20 for sensing the temperature in the upper volume 16 of the oven 10. A lower temperature sensor 118 is mounted in the left side wall 18 for sensing the temperature in the lower volume 14 of the oven 10. An oven temperature adjustable knob 120 is adjustable to set a desired temperature in the oven 10. The sensor 116 causes the heater element 100 to provide heat or not provide heat to maintain the temperature at the temperature setting of the adjustable knob 120 in the upper volume 16. The sensor 118 causes the heater element 40 to provide heat or not provide heat to maintain the temperature at the temperature setting of the adjustable knob 120 in the lower volume 14. An on-off switch 122 controls electrical power for the heater element 40 and the heater element 100. The oven 10 can be used as a conventional oven by operating the adjustable knob 120 and the on-off switch 122. A

second on-off switch 124 controls electrical power for the enhanced heating structure 30.

Referring to FIG. 5, an oven temperature control system 130 is operable to independently control the upper heating structure 90 and the enhanced heating structure 30 for providing heat according to the size of the upper volume 16 relative to the size of the lower volume 14 for heating the food substantially uniformly over its entire surface.

The upper temperature sensor 116 is connected to an upper oven temperature controller 132. The oven temperature adjustable knob 120 adjusts a dual control 134 consisting of a first potentiometer 136 and a second potentiometer 138. The first potentiometer 136 is connected to the temperature controller 132. The temperature controller 132 is connected to an upper heater power controller 140 which, in turn, is connected to the heater element 100. An A.C. power supply 142 is connected to the upper heater power controller 140.

The lower temperature sensor 118 is connected to a lower oven temperature controller 144. The second potentiometer 138 is connected to the temperature controller 144. The temperature controller 144 is connected to a lower heater power controller 146 which, in turn, is connected to the heater element 40. The A.C. power supply 142 is connected to the lower heater power controller 146.

One desired total wattage of the oven 10 is 1400 watts. The upper heater power controller 140 can be adapted to use a wattage selected from a range of 700 to 1050 watts. The lower heater power controller 146 can be adapted to use a wattage selected from a range of 350 to 700 watts such that a maximum of 1400 watts is available for the oven 10. Since the upper volume 16 has a larger area to heat than the lower volume 14, the higher range of 700 to 1050 watts is allocated for the upper volume 16.

When the adjusting knob 120 has been adjusted to a desirable temperature, the temperature sensor 116 will activate the upper oven temperature controller 132 to on and off conditions which, in turn, will activate the upper heater power controller 140 to on and off conditions. When activated, the upper heater power controller 140 will supply current to the upper heater element 100 for heating the upper volume 16 of the oven 10 and for maintaining the desirable temperature. The temperature sensor 118 will activate the lower oven temperature controller 144 to on and off conditions which, in turn, will activate the lower heater power controller 146 to on and off conditions. When activated, the lower heater power controller 146 will supply current to the lower heater element 40 for heating the lower volume 14 of the oven 10 and for maintaining the desirable temperature.

To use the enhanced heating structure feature of the oven 10, the on-off switches 122 and 124 need to be turned on and the adjustable knob 120 needs to be set at a desired oven temperature. The high voltage supply 88 will then generate a high voltage field between the flat plate 70 and the needle electrodes 36 which causes an increase in the rate of heat transfer from the heater element 40 to the flat plate 70. This increase in the rate of heat transfer decreases the cooking time relative to conventional ovens.

While a preferred embodiment of the invention has been shown and described herein, it is obvious that numerous additions, changes and omissions may be

made in the embodiment without departing from the spirit and scope of the invention.

What is claimed is:

1. An enhanced heating structure for an oven having a bottom, a top, and sidewalls providing a housing comprising:

a platform supported on the bottom of the oven;

a plurality of spaced apart needle electrodes supported on said platform and projecting upward therefrom;

a heater element supported by the oven housing electrically isolated from and located adjacent said needle electrodes and connected to an electrical power supply;

an electrically conducting flat plate;

means on the oven housing supporting said flat plate above and spaced from and electrically insulated from said needle electrodes and said heater element, said means and said flat plate forming within the oven housing an enclosure of selected volume for enclosing said needle electrodes and said heater element; and

means for generating a high voltage field between said flat plate and said needle electrodes for increasing the rate of heat transfer from said heater element to said flat plate.

2. The enhanced heating structure as claimed in claim 1 wherein said supporting means is a frame made from an electrical insulating material for electrically isolating said flat plate from the oven.

3. The enhanced heating structure as claimed in claim 2 wherein said frame is made from a ceramic material.

4. The enhanced heating structure as claimed in claim 1 wherein said generating means includes a high voltage power supply connected to said flat plate for generating said high voltage field in a direction from said needle electrodes to said flat plate.

5. The enhanced heating structure as claimed in claim 1 wherein said flat plate has a continuous smooth top surface.

6. The enhanced heating structure as claimed in claim 1, further including an upper platform supported on the top of said oven, a plurality of spaced apart needle electrodes supported on said upper platform and projecting downwardly therefrom; and an upper heating element electrically isolated and located adjacent upper needle electrodes and connected to said electrical power supply.

7. An oven for heating food comprising:

the oven having an upper volume and a lower volume;

an upper heating structure operable for heating said upper volume having a predetermined size to heat the food from above the food;

a lower heating structure operable for heating said lower volume having a predetermined size to heat the food from below the food, said lower heating structure having a plurality of electrodes in said lower volume, an electrically conducting flat plate supported above said electrodes, and means for generating a high voltage field between said flat plate and said plurality of electrodes; and

control means for independently controlling said upper heating structure and said lower heating structure for providing heat according to the size of said upper volume relative to the size of said lower volume for heating the food substantially uniformly over its entire surface.

8. The oven as claimed in claim 7 wherein said control means includes a first temperature sensor for sensing temperature in said upper volume and a second temperature sensor for sensing temperature in said lower volume for independently maintaining a desired temperature in said lower volume relative to said upper volume.

9. The oven as claimed in claim 7 wherein the size of said upper volume is larger than the size of said lower volume, said upper heating structure being adapted to use a predetermined wattage for heating said upper volume, and said lower heating structure being adapted to use a wattage less than said predetermined wattage for heating said lower volume.

10. An oven having a bottom, a top, and sidewalls for heating food, said oven comprising:

an upper volume and a lower volume;

an upper heating structure operable for heating said upper volume to heat the feed from above the food;

a lower heating structure operable for heating said lower volume to heat the food from below the food;

said lower heating structure having a platform supported on the bottom of the oven;

a plurality of spaced apart needle electrodes supported on said platform and projecting upward therefrom;

a heater element electrically isolated and located adjacent said needle electrodes and connected to an electrical power supply;

an electrically conducting flat plate;

a non-electrically conducting frame supporting said flat plate above and spaced from said needle electrodes and said heater element, said frame and said flat plate enclose said needle electrodes and said heater element to form said lower volume;

means for generating a high voltage field between said flat plate and said needle electrodes for increasing the rate of heat transfer from said heater element to said flat plate; and

control means for independently controlling said upper heating structure and said lower heating structure for providing heat according to the size of said upper volume relative to the size of said lower volume for heating the food substantially uniformly over its entire surface.

* * * * *

D7/352

with High Quality.

Snack /Sandwich Maker

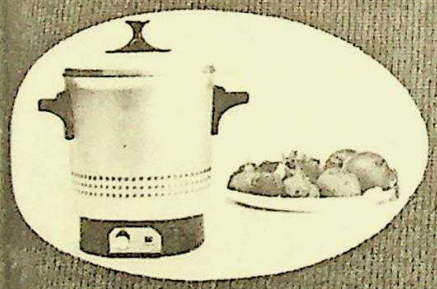
Model EH 821

* Easy to Operate.
* Shortly Prepared Your Sandwiches within Minutes.
* Thermostatically Controlled and Ready to Cook Light Indicator.
* Fr-Pet Plastic Casing with Delux Design.
* Non-Stick Surface for Easy Cleaning.

Deep Fryer

Model FE 822

* Suitable for Multi-Cooking Styles— Deep Fry, Boiling, Stewing, Steaming.
* Non-Stick Coating.
* Equipped with Temperature Control which enable for Instant and Long Hours Cooking.



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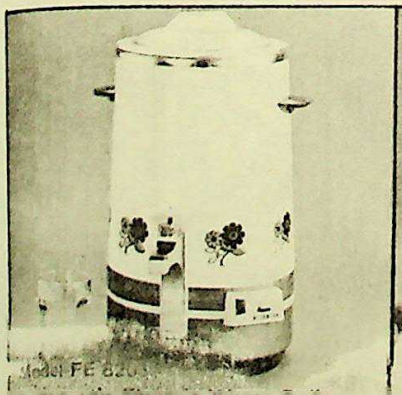
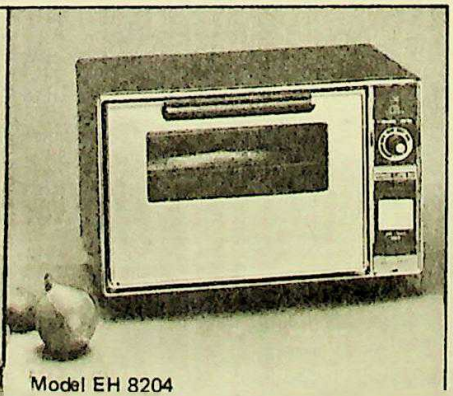


Model FE 8203



Model EH 8204

HI-SEN

HISENTEK INDUSTRIAL AND TRADING COMPANY LTD.

Room A, 18/Fl., Wing Wah Commercial Building
450 Shanghai St., Kowloon, Hong Kong.
Tel.: 3-322531 Cable: HSTCZ
Telex: 39628 HISEN HX

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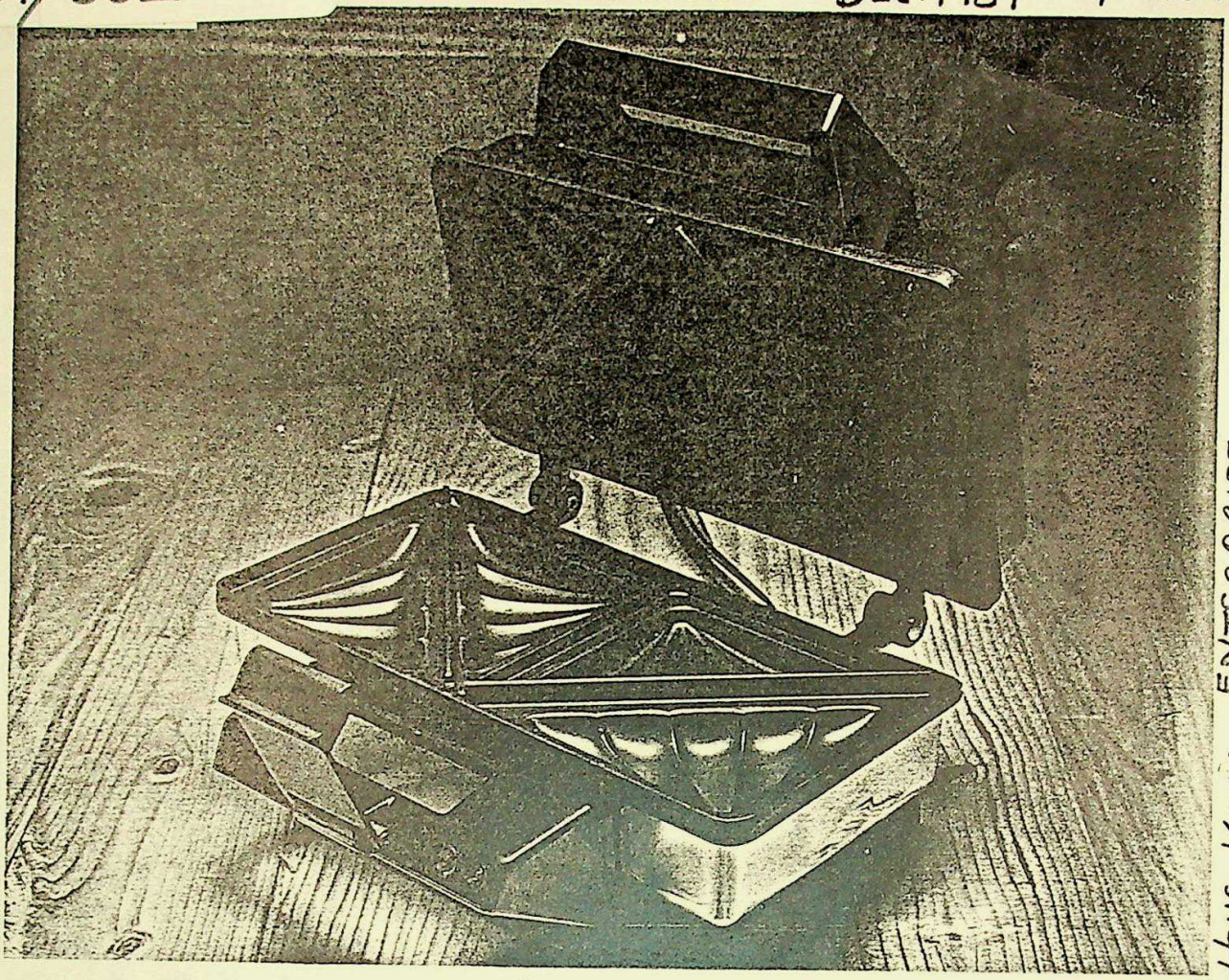

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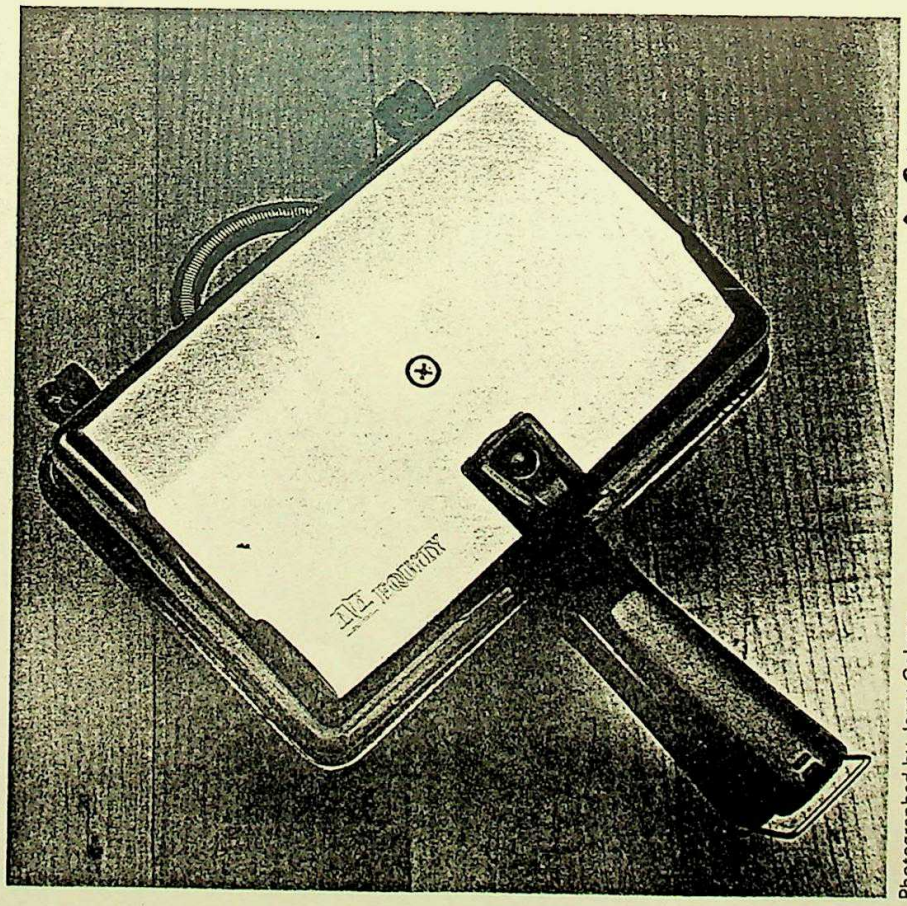
▲ "Equity" Sandwichcrafter from Chiap Hua Industries Ltd. is a snack-n-sandwich maker that can provide a fast, convenient and energy-saving way of preparing all kinds of snacks such as combread, blueberry muffins, sausage rolls, etc. It allows one to create any appetizing and enjoyable combination sandwiches and snacks. The toaster is made of chromium plated steel plate, alluminium alloy and bakelite. The cooking surface is specially coated with non-stick teflon to make cleaning much easier. Its scallop mould gives an attractive shape to sandwiches.

▶ "Equity" Snack-n-Toaster, another quality product from Chiap Hua Industries Ltd., is similar in function with the one mentioned above. The toaster contains various special features to make preparation of a meal very simple. Operation is so easy that even a child can make himself a hot meal. One simply closes the lid of the toaster, turns on the power and preheats it for 8 minutes. When the toaster has reached the right cooking temperature, the indicator light will turn on. Then all one does is to put in the bread and butter and filling, and close the lid. The mouth-watering sandwich will be ready in minutes. All Equity Snack-n-Sandwich toasters and similar products come with a 12-month guarantee and a comprehensive instruction booklet.

◀ This elegantly-designed and strongly-constructed electrical helper is also a "Sandwich Toaster", from Electrical & Electronics Ltd. It provides tasty snacks or meals in minutes. The body is manufactured from shock resistant plastic. The heated platens are thermostatically controlled and surface-coated in a high quality non-stick material. The toaster is designed to seal and cut up sandwiches and shape them into attractive golden brown scallop shapes, thus retaining all the flavours and producing perfect results.



Photographed by Jerry Gokson

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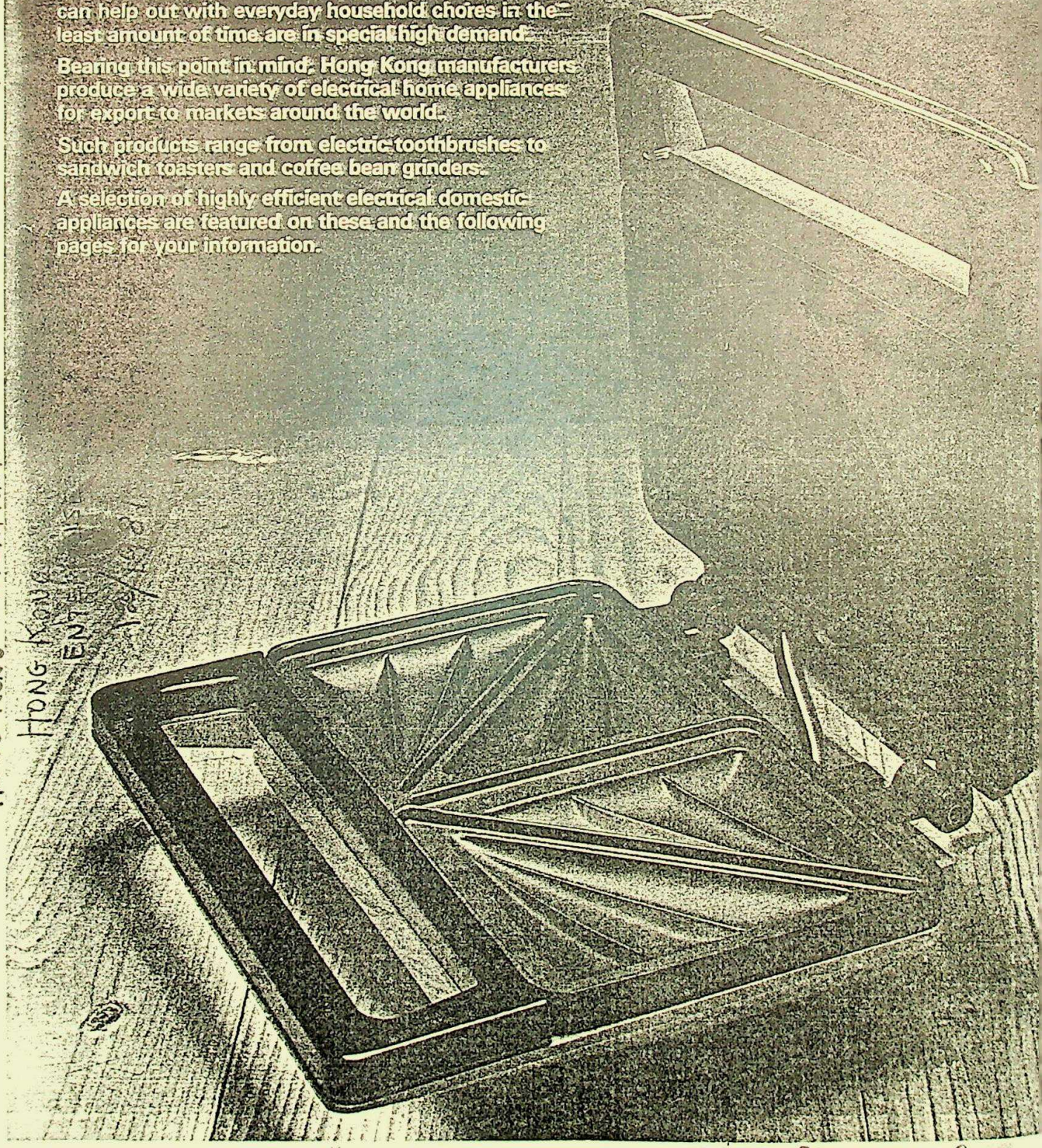
ELECTRICAL HOME HELPERS

As time-saving and labour-saving devices for the modern home are indispensible, home appliances that can help out with everyday household chores in the least amount of time are in special high demand.

Bearing this point in mind, Hong Kong manufacturers produce a wide variety of electrical home appliances for export to markets around the world.

Such products range from electric toothbrushes to sandwich toasters and coffee bean grinders.

A selection of highly efficient electrical domestic appliances are featured on these and the following pages for your information.



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"SANDWICH TOASTER" FROM ELECTRICAL & ELECTRONICS LTD.

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• Wear-Ever: Increases will average a little over 6 per cent, "pretty such across the board," a spokesperson said.

"Very isolated changes" will be made in Northland Aluminum's line for its Dec. 1 move, according to national sales director, Ed Carlisle. These few piece changes will be up about 4 per cent.

The lone company with no changes for the first half of next year was Revere Copper & Brass. "We had a satisfactory price hike in the middle of this year," group president, Jack Eikenberg said. Revere's prices went up 6 to 7 per cent for the July housewares show.

Sunbeam to Up Prices

OAK BROOK, Ill. — First-half price changes for Sunbeam Appliance Corp. will average 2 per cent above prices of May 1978.

According to a Sunbeam spokesperson, these changes on kitchen appliances, personal care, and home care products will be effective Jan. 8, and were announced to Sunbeam customers last week.

ARNOLD DREYFUSS, Farberware: "Microwave market is about 1 million units. I'd be happy if convection ovens could get a market half that large." Page 34.

HFD — Retailing Home Furnishings, November 27, 1978

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dazey donut factory® IV

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HOUSEWARES
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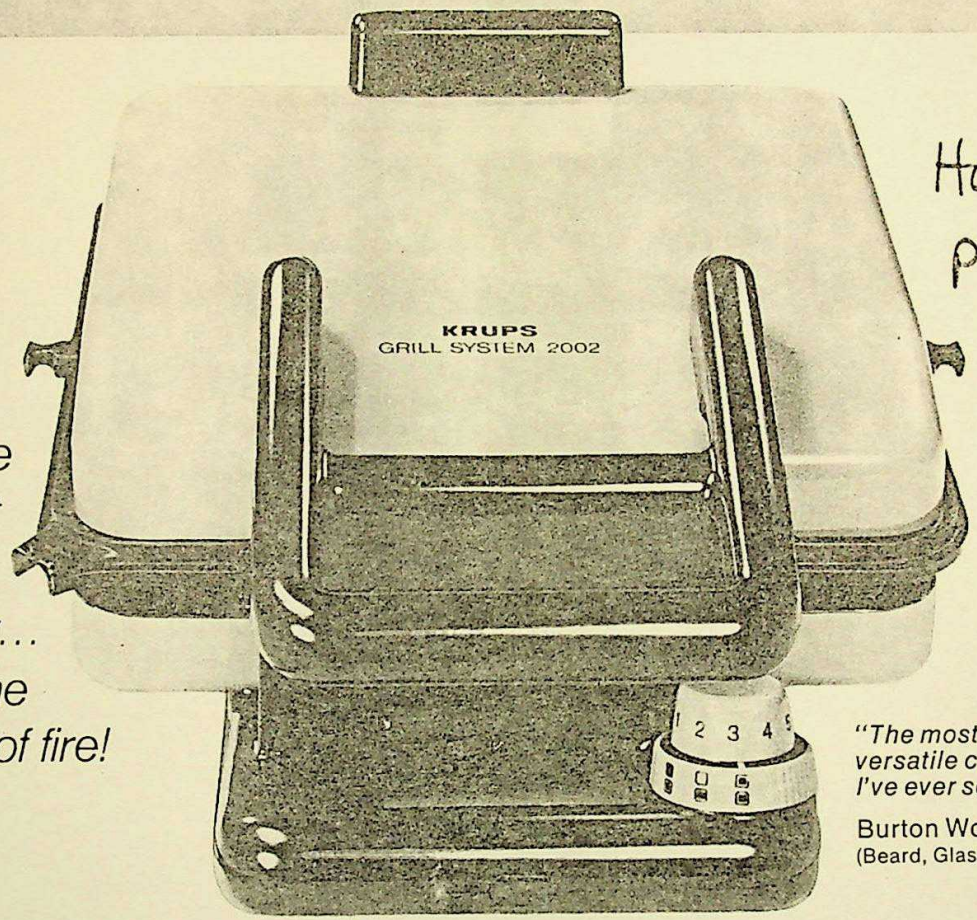

The most brilliant new idea in cookery... since the discovery of fire!

"The most compact, versatile cooking system I've ever seen"

Burton Wolf
(Beard, Glaser, Wolf . . . COOK'S CATALOGUE)

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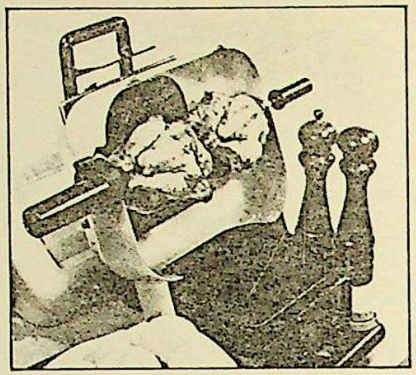
JULY 1-7-1978

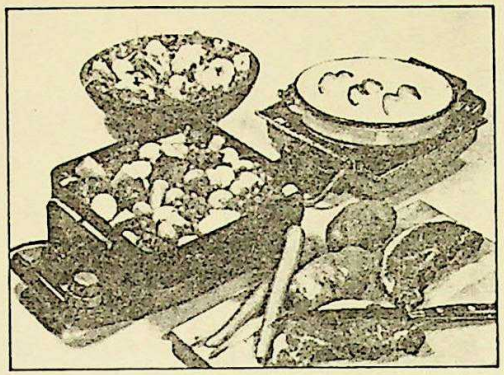
"ALL-IN-ONE" COOKING SYSTEM

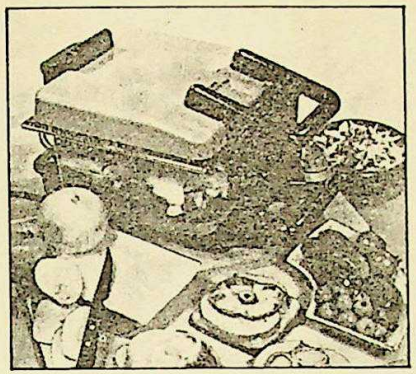
A precision engineered, compact *portable* unit that performs almost every cooking task quickly and easily . . . from everyday recipes to gourmet cookery. Indoors or out.

Outstanding features make the "All-In-One" cooking system the most incredibly versatile

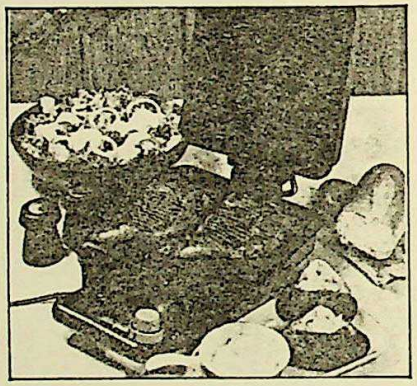
Outstanding features make the "All-in-One" cooking system the most incredibly versatile small kitchen electric. It offers fine American department stores and gourmet shops the first really new appliance since the food processor.

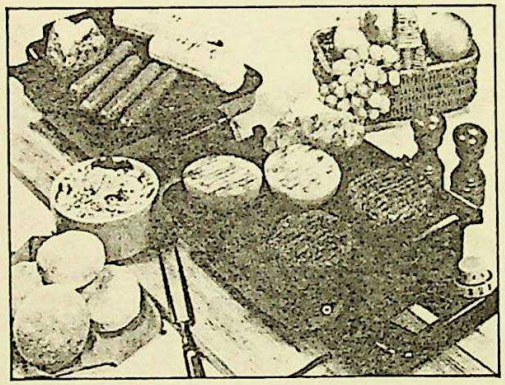


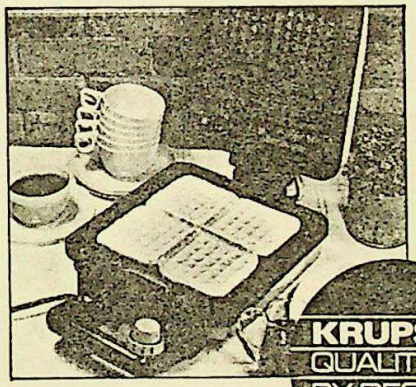




Broils! Boils! Bakes! Fries! Stews! Roasts! Barbecues!







KRUPS
QUALITY...
BY DESIGN!

Come see us at the
National Housewares Exposition in Chicago

(Booths 433-435)

and see an exciting multiple-unit demonstration of KRUPS "ALL-IN-ONE." See the kitchen of tomorrow . . . in a superior quality KRUPS product that's here, today.

(BOTTOM HALF OF P. 51)

ROBERT KRUPS, NORTH AMERICA, 3 PEARL COURT, ALLENDALE, N.J. 07401 • 201/825-1116

07/352

housewares

GE Adds Bag Sealer, Donut Maker, Slicer

BRIDGEPORT, Conn. — General Electric Co.'s housewares division is emphasizing specialty appliances in its offerings for the National Housewares Exposition.

On view at McCormick Place next week will be a donut maker, bag sealer, food slicer, Toast-R-Oven and 1400-watt hair dryer, as well as two new wall clocks.

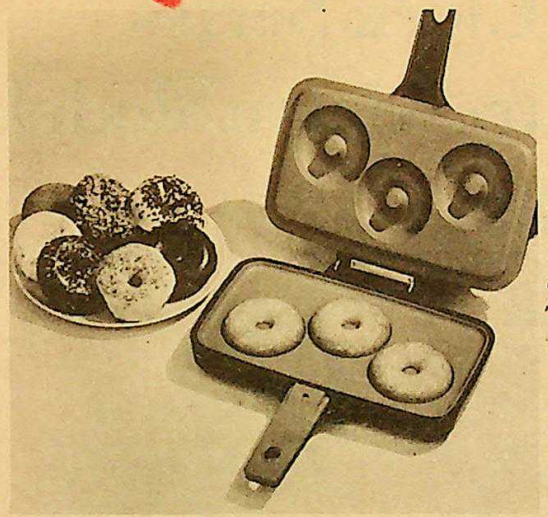
Triple Treat, the Model DM-1-3830-112 donut maker, makes three donuts, features a brown GE non-stick coated cooking surface, and has a removable flip grid to facilitate removal of the cakes. The unit carries a suggested retail ticket of $18.98.

Model BAG 10-4103-002 is a bag sealer which will seal both boil- the unit weighs 15 ozs.

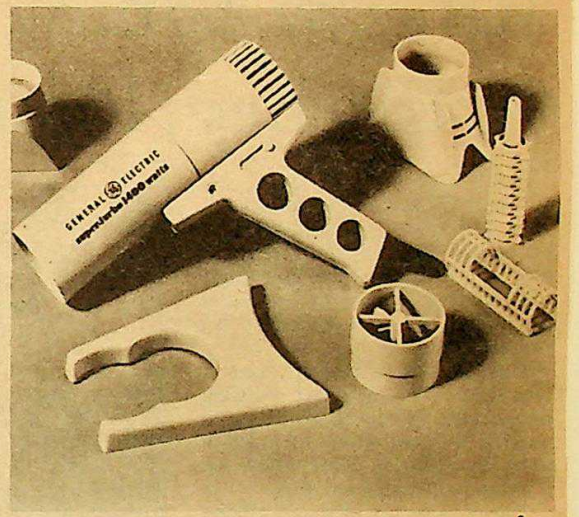
The firm is also unveiling two clocks.

Available in either white or harvest is a rectangular wall clock retailing at a suggested $6.98. It features bold black numerals on a white ground, and is Model 2203-001 in white, 2203-006 in harvest.

A woodgrain finish on a polystyrene case characterizes another wall clock offering, which is available either as an electric or battery-operated unit. Model 2204, the electric clock, carries a suggested retail of $18.98, while the battery-powered unit, Model 2589, has a $28.98 suggested ticket.



THREE-HOLE DONUT MAKER from General Electric bakes 3⅛-in. donuts in five minutes after 10-minute initial heat-up. Unit has removable flip grid that helps turn donuts onto plate. Retails at $18.98.



PRO 11 SUPER-TURBO hair dryer operates on 1,400 watts. It has five accessories and weighs 15 ozs. Retail price is $27.98.

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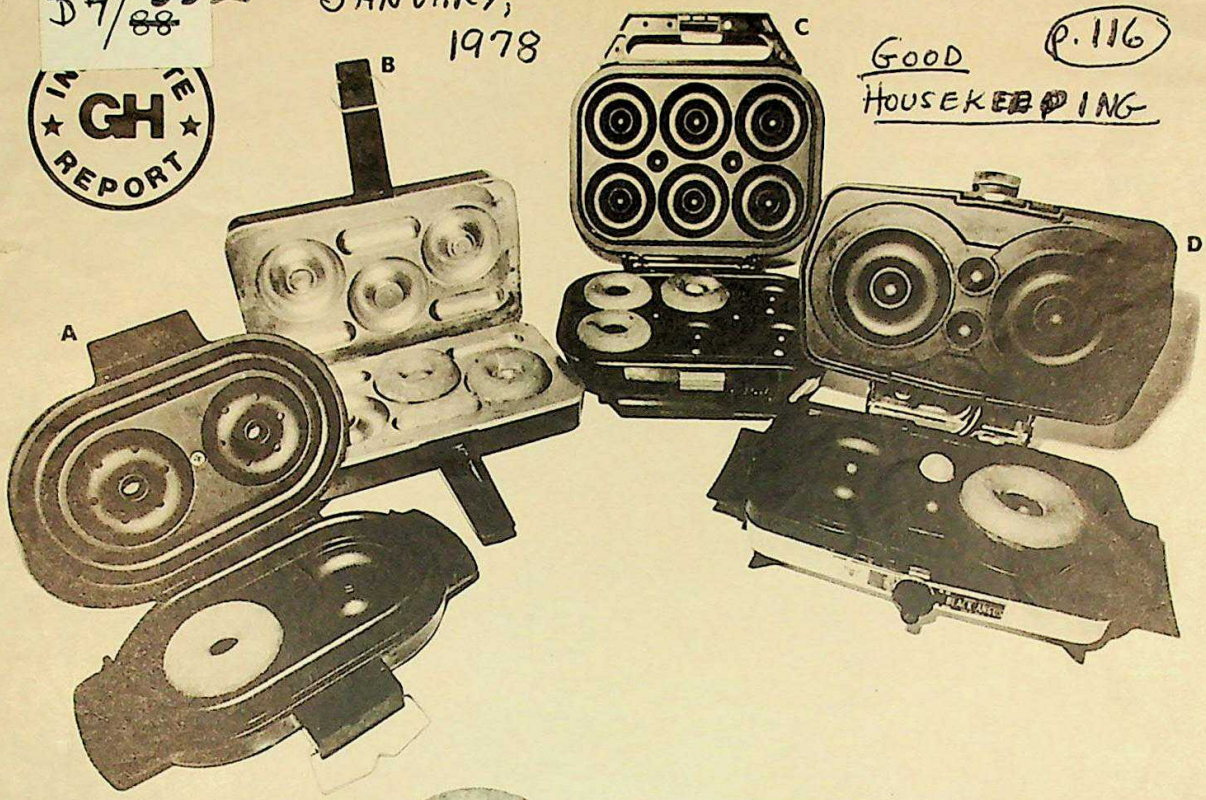

Shopping guide to those fast new

DONUT MAKERS

Home "donut makers" aren't a serious threat to doughnut shops, yet, but they do offer a quick hot snack for hungry doughnut lovers. Just prepare a bowl of batter while you preheat the appliance (up to 10 minutes) and spoon into the ring-shaped depressions. Close the cover and in five minutes or less—doughnuts, 3 to 3½ inches in diameter, costing only about 5 cents each.

We tested the appliances in our Institute kitchens and found the basic doughnut recipes in accompanying recipe books worked well. We also made doughnuts using packaged mixes and had great success with some, particularly pound cake, corn bread and gingerbread, muffins and coffee cake (barely stirring the topping right into the batter gave the doughnuts a crunchy texture). Bagel-batter recipes, however, were disasters. Whatever batter you use, "get 'em while they're hot." On cooling, the doughnuts do tend to get heavy textured.

How do they work? Basically, donut makers work like waffle bakers, with heating elements concealed in the top and bottom or in the bottom only. Those with just one element produce "two-tone" doughnuts. You can flip them over for a minute, or cover up the difference with sugar or frosting. Cleanups can be difficult; nonstick interiors help. Only top sections without heating elements are immersible.

Handling tips: Use a large spoon, or cup with pouring lip, to transfer batter. Lift doughnuts out by loosening at edges with a fork. Place on rack.

Listed here, doughnut makers we liked. All prices, approximate. Note: The higher the wattage, the faster the unit preheats and cooks. (Preheating times not included in listing.)

A. Dazey: Donut Factory #DF2, 300 watts. Bakes 2 doughnuts in 5 minutes. Nonstick interior; bottom heating element. $30.

B. MacDonald Home Products: Donut 'n Stix #M1006, 400 watts. Bakes 3 doughnuts plus 3 "stix" in 3 minutes. Top and bottom heating elements. $30.

C. Exeter: Donut Baker #766-01, 750 watts. Bakes 6 doughnuts plus 8 "holes" in 3 minutes. Nonstick interior; top and bottom heating elements. $40.

D. Black Angus: Double Donut Baker #932862, 1,100 watts. Bakes 2 doughnuts plus 4 "holes" in 3½ to 5 minutes. Adjustable temperature control; top and bottom heating units; removable grids. $35. Interchangeable waffle, sandwich and hamburger grids also available, $12 to $13 each.

E. Hamilton Beach: Donut Maker #200 (not shown), 600 watts. Bakes 2 doughnuts in 5 to 7 minutes. Nonstick interior, bottom heating element. $30.

F. Sears: Doughnut Machine #346404 (not shown), identical to Dazey's Donut Factory. ◆

INSTITUTE/APPLIANCES & HOME CARE/JANET BRIGGS

NOVEMBER

Basic White Loaf, Party Rolls—from one dough

DECEMBER

Cardamom Christmas Wreath: designed for the holidays, great eating any time!

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HOME FURNISHINGS DAILY
JAN. 31, 1977
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SILENT ON DETAILS

GE Developing Food

NEW YORK — A high General Electric official, has confirmed reports wafting through the housewares industry for weeks that the company is developing a food processor.

W.D. Dance, vice chairman of the board and executive officer of GE, broke the company's silence in response to a query from HFD at a press conference here.

"The housewares people are working on it (food processo you anything from them."

Spokesmen continue to re processor app numerous indu been informed such a product the July house

Donut Factory Enters Production in March

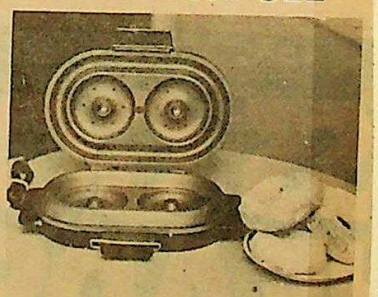
KANSAS CITY, Mo. — The Dazey Products Co. donut maker is scheduled for initial production in March with shipments to begin to the New York area June 1.

Suggested retail for the unit is $24.95.

Made of black phenolic with a Teflon-coated interior, the Donut Factory, Model DF 2, is oval. The top half is immersible. A book with 50 to 60 recipes is included in the four-color package.

The unit heats up in seven to eight minutes and can cook two donuts, made of home made batter, in five to six minutes.

Dazey said it will back up the



THE DONUT FACTORY — Dazey Products' donut machine is scheduled for March production and initial deliveries on the East Coast in June. Suggested retail price is $24.95.

KRUPS Grill System 2000 – einfach vielfältig

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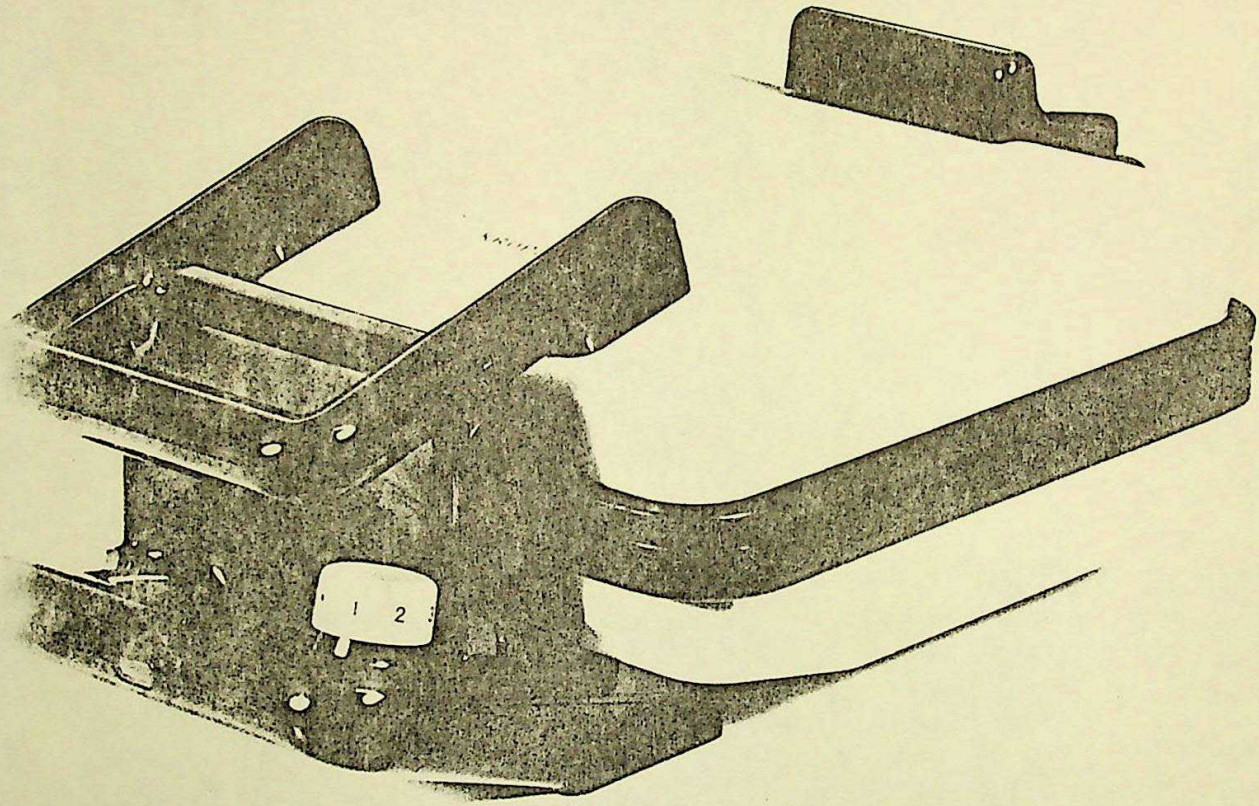
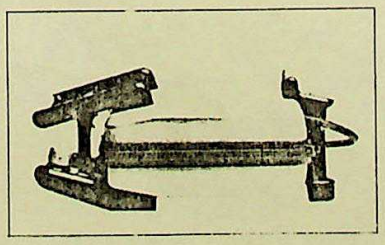
JAN. 1977

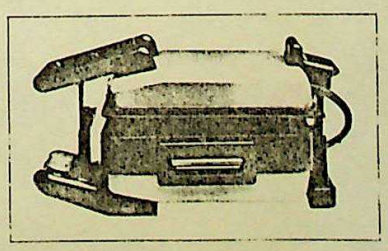
1-1977
"FORM" p. 80



Krups Grill System 2000 – 6 Geräte in einem



Kontaktgrill: Für alles Kurzgebratene. Poren des Grillgutes werden sofort von beiden Seiten geschlossen.



Casserole: Sie wird für alle Bratvorgänge eingesetzt.

(OVER)↓

emka Moderne Küchentechnik GmbH
Postfach 7, 7444 Beuren

Design: Slany Design, 7300 Esslingen

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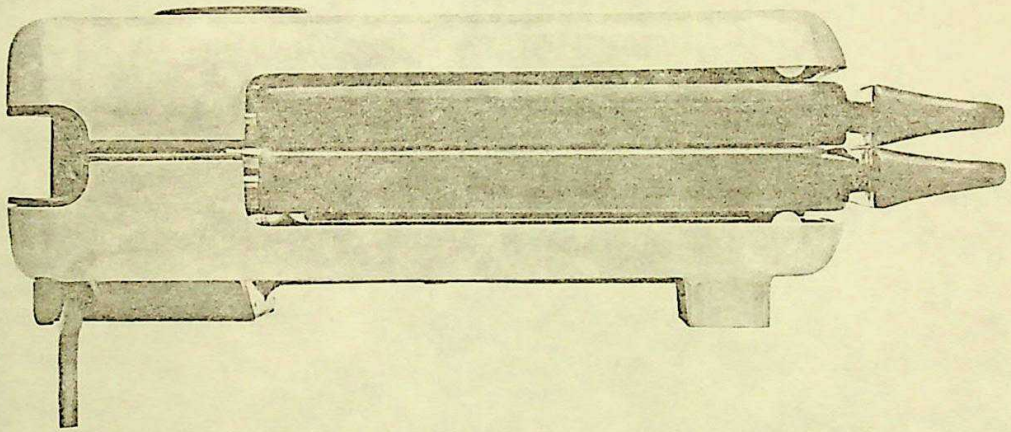
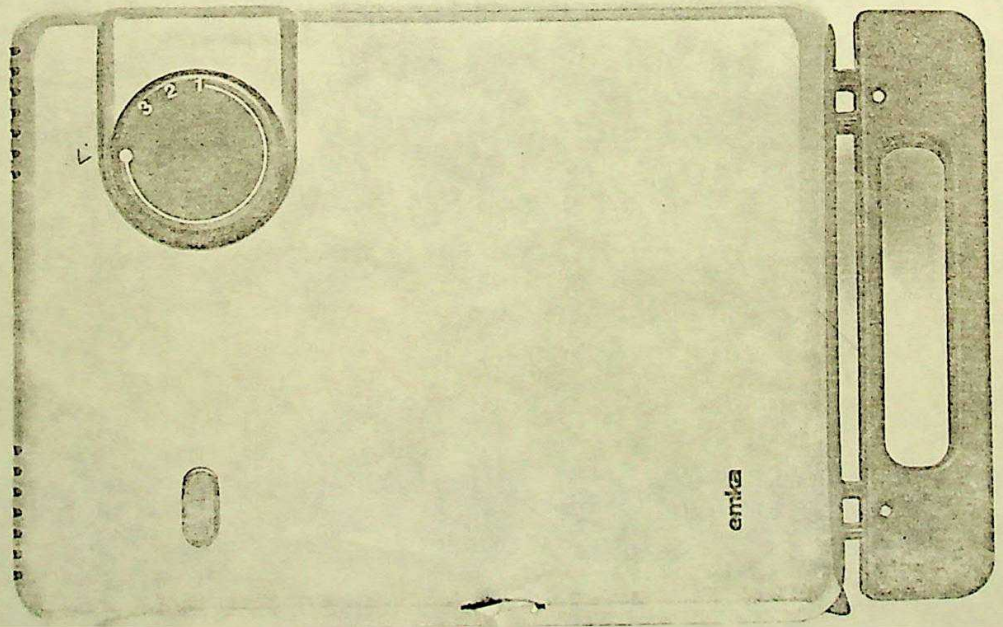
Grill- und Waffelautomat

4 Funktionen in einem Gerät: grillen, waffelbacken, toasten, überbacken. Schutzrechte angemeldet.

FORM 1-1976





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HOME FURNISHINGS DAILY OCT. 2, 1975 SECTION TWO P. 4
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A cooking method so new, we invented a word for it: Froiling.

Everyone likes the full flavor of fried foods. But your customers also know the healthfulness of low-fat broiling. With the Mirro-Matic Whiz-Grid, they'll get both. That's froiling. A new word, for a new way to boost sales.

The slanted cooking surface makes the difference. Fat drains into a removable Lexan tray. What's left to enjoy is wholesome greaseless froiling.

Concentrated heat from two Teflon-coated aluminum grids cooks top and bottom simultaneously, saving energy. In about half the normal time, the Whiz-Grid makes delicious burgers, steaks, bacon, fish, franks, sandwiches. And more.

Froiling surface, 11″ x 5⅞″. Cover opens flat so both grids can be cleaned easily. In porcelain finish of Gold, Avocado, or Poppy.

The Mirro-Matic Whiz-Grid Speed Grill. A new way we've invented to cook up profits.

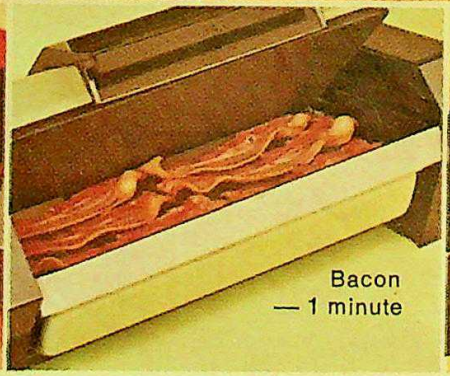
Mirro-Matic WHIZ-GRID Speed Grill.

Steak — 1 to 6 minutes

Grease tray slides out from rear

Mirro Aluminum Company, Manitowoc, Wisconsin 54220
Continental Plaza, Hackensack, N.J. 07601 • Park Plaza, Park Ridge, Ill. 60068

Hamburger — 3 minutes



Bacon — 1 minute

Reuben sandwich — 2 to 2½ minutes

Window shop Regal

:t line reflects what she wants Poly Perk® electric coffee makers, s, continue to mirror your customers' good taste in perks. And a new 5½ quart Regal Poly Pot™ :f in her kitchen while she's away. A new 4-quart Poly Pop® corn popper and Poly Insta-Hot also :tric™ product line. And whatever is on her mind in cookware, Regal can turn it into a happy e no one offers a more complete line of cookware than Regal. Stock and sell Regal — a unique quality that stops her shopping, starts her buying.

1. Our Poly represents the Regal family of Polylectric™ products. They stay beautiful longer because the colors won't scratch off. 2. New Poly Insta-Hot. 3. Harvest porcelain-clad aluminum cookware. 4. Poly Perk® electric coffee maker (4-8 cup). 5. Poly Perk® electric coffee maker (10-20 cup). 6. Poly Perk® electric coffee maker (2-4 cup). 7. New Poly Pop® 4-quart corn popper. 8. 3-ply stainless steel cookware. 9. New Poly Pot™ s-l-o-w cooker.

Regal®

Regal Ware, Inc.
Kewaskum, Wisconsin

D7/352

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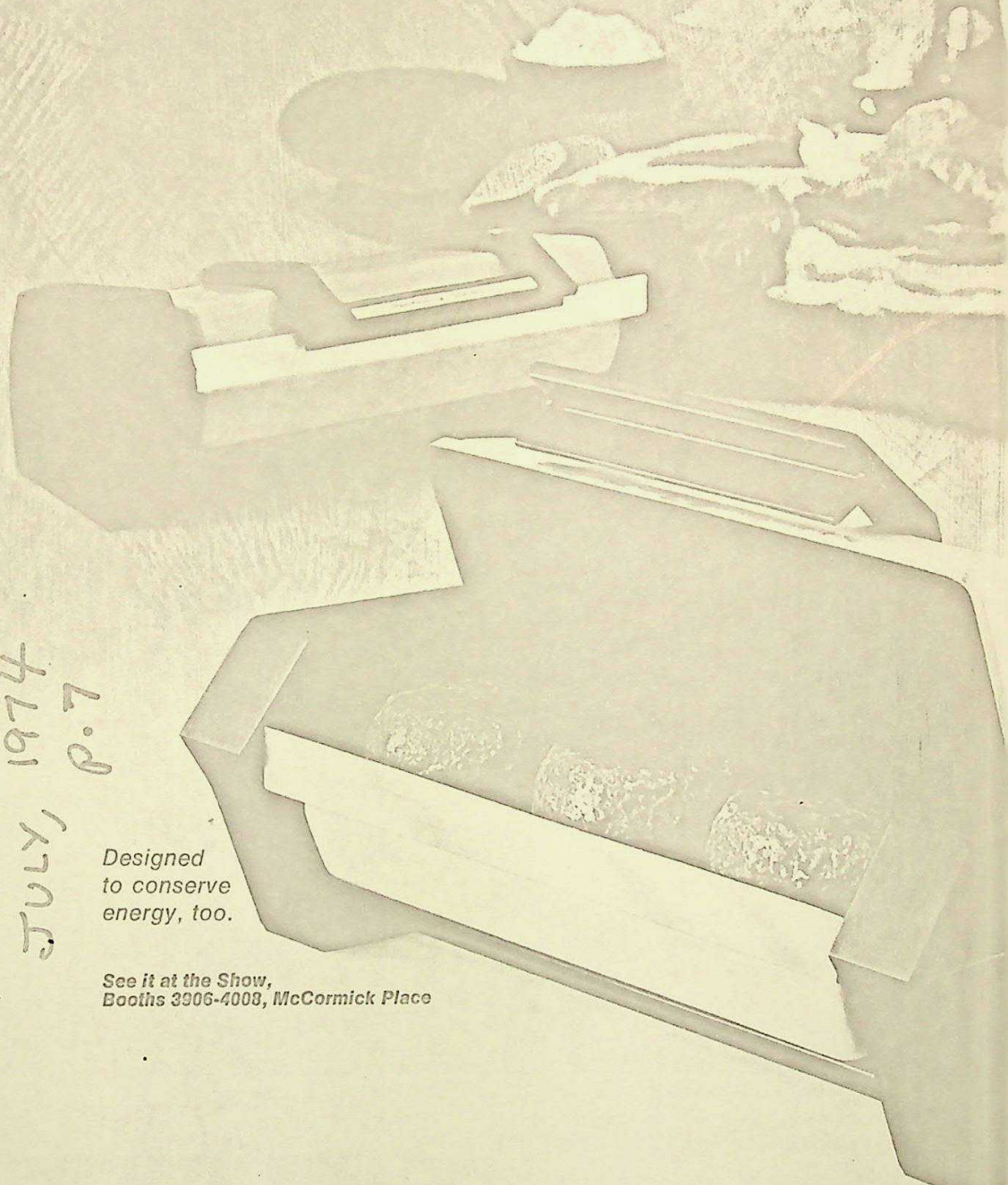
Mirro-Matic Whiz-Grid brings you FROILING:

A whole new way of preparing food.



HOUSEWARES
JULY, 1974
P. 7

Designed to conserve energy, too.

See it at the Show, Booths 3906-4008, McCormick Place

*The full flavor of frying, the healthful values o

Mirro-Matic has cooked up a new appliance that could become the biggest seller since the pop-up toaster. The Whiz-Grid Speed Grill "Froils" burgers, sandwiches, bacon —even one-inch steaks in half the time other methods require. Because the Whiz-Grid cooks both sides simultaneously in the same even heat.

The Whiz-Grid's secret is concentrated, thermostatically controlled heat from dual, self-adjusting Teflon®-coated aluminum grids . . . slanted to drain grease into a removable Lexan®drip pan. Clean-up is a whiz with the Whiz-Grid.

Let the Mirro-Matic Whiz-Grid cook up greater volume for you. Available in Harvest Gold, Avocado or Poppy porcelain finish with ebony trim. Froiling surface 11 x 5⅞".

MIRRO ALUMINUM CO., Manitowoc, Wis. 54220
Continental Plaza, Hackensack, N.J. 07601
315 Second St. (Warehouse), San Francisco 94107
Kennedy-O'Hare Office Center, Chicago 60631
World's Largest Manufacturer of Aluminum Cooking Utensils

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GOOD HOUSEKEEPING

LITTLE-LUXURY GIFTS FOR EASY LIVING
continued

(top of page)

Electric pizzelle-and-waffle baker has two reversible Teflon-coated grids: one side (shown) is especially for making Italian pizzelles; the other is used for baking waffles. A recipe for the thin, slightly sweet cookies is printed right on the handle. Comes in a choice of colors; Chrome, Harvest Gold or Avocado. About $22. "Pizzelle Maker and Waffle Baker," Rival, 36th and Bennington, Kansas City, Mo. 64129.

GOOD HOUSEKEEPING
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Smooth-top cooking surface is now available in a modern-looking table-top unit. It's just the thing for cooking foods right at the table or keeping buffet dishes at serving temperature. Range is thermostatically controlled; comes with its own 2½-quart ovenproof casserole and cover, but other cookware may also be used. About $40. "Table Range," by Corning, Corning, N. Y. 14830.

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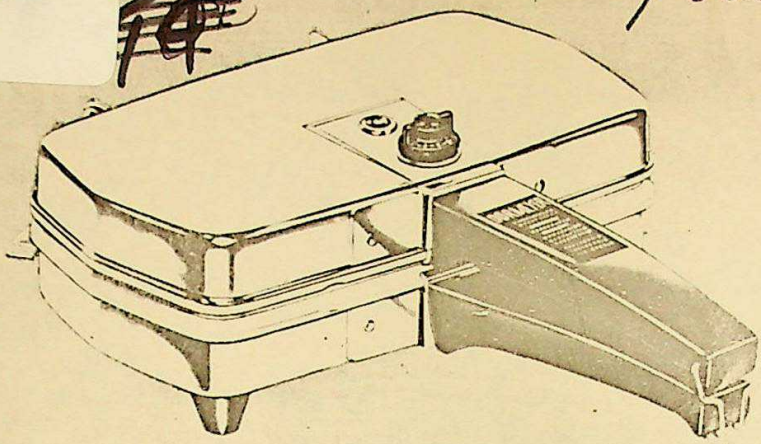


Dormeyer double grid grill and waste disposers — booth 557

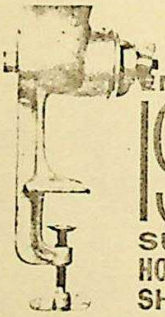
Dormeyer's new party grill features two sets of interchangeable grids. One set is designed to turn out hors d'oeuvres in club, diamond, heart and spade shapes. With the other set, unit (Model FG-1) becomes a family size waffler capable of delivering four waffles at a time. Waffle grids can be reversed to convert the grill to a sandwich toaster.

Other features include thermostatic control, signal light, and expandable hinges. Suggested retail price is $27.95.

Waste disposer Model WD-5 features die-cast aluminum construction, glass fiber insulation, and overload protector. Unit, weighing 28 lbs., is designed to fit standard sink opening of 3½ to 4 inches, has a "jiffy mount" attachment ring for easy installation. Disposer's suggested list price is $69.95.

Smaller, lighter Model WD-4 without die-cast construction carries a suggested retail price of $49.95.

Dormeyer Div., Webcor Inc., Chicago, Ill.



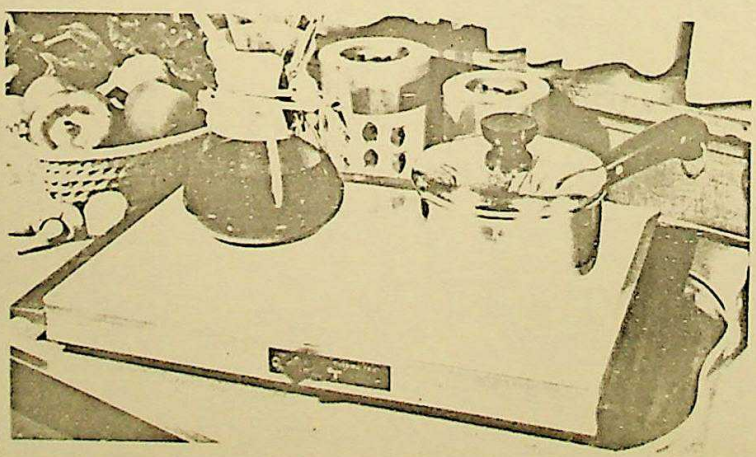
EM WEEK'S
1963
SUMMER
HOUSEWARES
SHOWCASE

Detecto's new line of chairs and stools — booth 1006

Both chairs and stools in the new line from Detecto feature "brass-plate" finish and foam-cushioned seats in either fluted vinyl or moire vinyl. Model S208 (left) with fluted seat comes in gold, white, black and pink. Chair on the right, Model S838 with moire seat, comes in gold, pink, white, black, green, orange and blue. Both weigh 8½ lbs., measure 24 by 15½ by 14½ in.

The texture and colors of the vinyl coverings are designed to match scale and hamper ensembles in the Detecto line. Suggested retail price of the chairs is $12.98 ($13.98 west of Miss.), while the stools list at $8.98 ($9.98 west of Miss.).

Detecto Scales, Inc., Brooklyn 5, N.Y.



Cornwall introduces elec

A line of hot electric trays for under $20 has been intr by the Cornwall Corp. All uni cept the $5.95 trivet, have adj thermostats and porcelainized surfaces. The trim is golde dized aluminum and the hand each tray are walnut.

The line consists of four priced between $5.95 and $ Model T64 at $5.95 retail is 1

E.M.W. 7-15-63

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HOME FURNISHINGS DAILY, THURSDAY, OCTOBER 25, 1962

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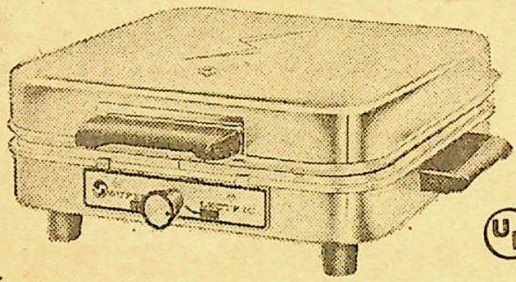
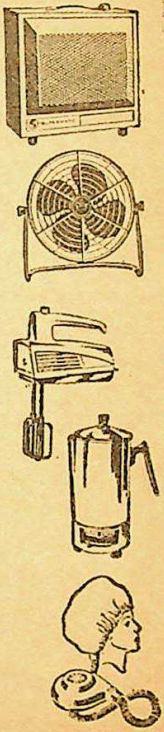
...ATION FOR PROFITABLE SELLING...





SUPERLECTRIC AUTOMATIC COMBINATION SANDWICH GRILL-WAFFLE IRON has multi-purpose appeal for customers, assures profitable business for you. Toasts, broils, fries . . . grills sandwiches, bakes waffles.

- REVERSIBLE GRIDS
- 4-SANDWICH CAPACITY
- AUTOMATIC THERMOSTAT
- HEAVY CHROME FINISH
- JEWELED INDICATOR LIGHT

Quality Home Appliances Since 1922

SUPERLECTRIC

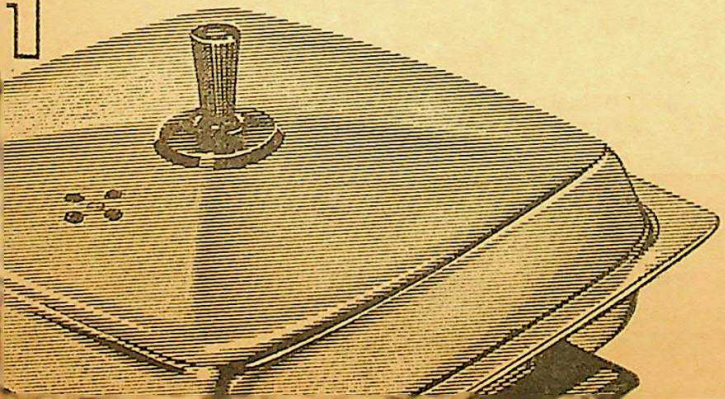
SUPERIOR ELECTRIC PRODUCTS CORP.

SINCE 1922 **CAPE GIRARDEAU, MISSOURI**

STMASTER®

PLIANCES PEOPLE TRUST

THE *IMPERIAL* BUFFET FRY PAN
ALL STAINLESS STEEL
(completely immersible)



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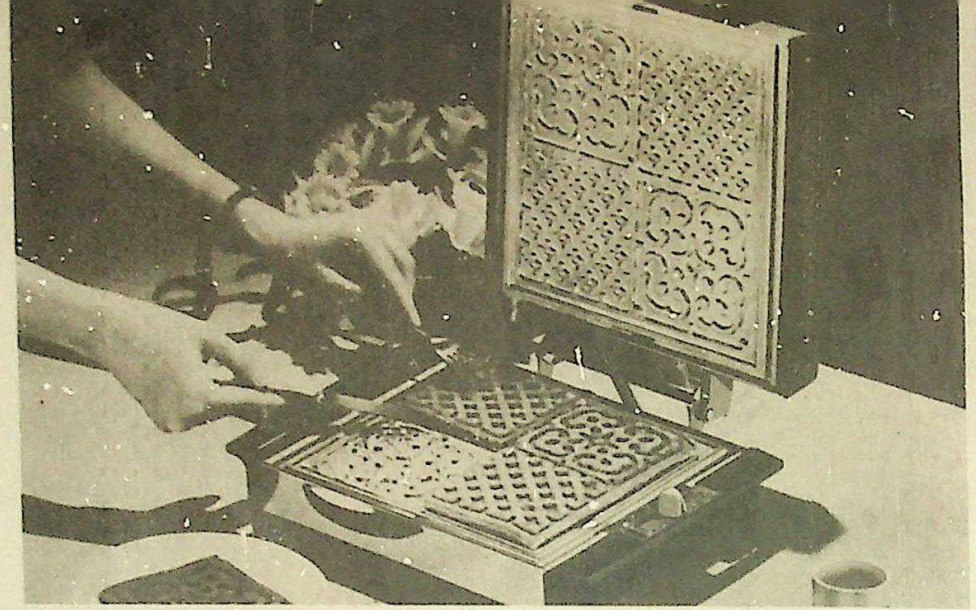
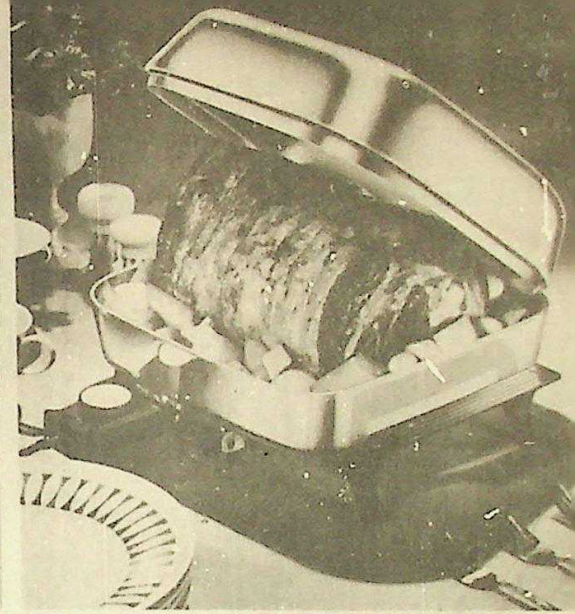




New iron, Roast-N-Fryer, and waffler from Dominion

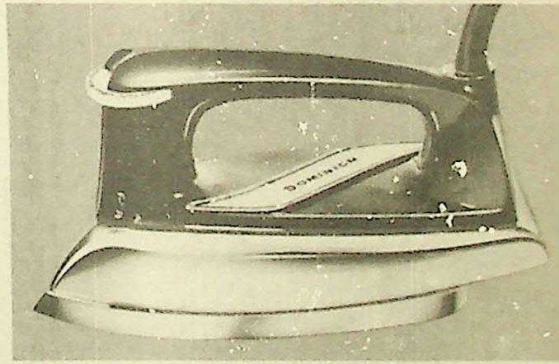
Dominion's new waffler (above) features "gourmet grids" which turn out waffles in a Florentine design rather than the conventional "egg crate pattern." The unit (model 1250) bakes four plate-size waffles at a time. When the grids are reversed, the appliance doubles as a sandwich grill. Suggested retail price is $34.95.

Two new Roast-N-Fryers (models 2258 and 2268) feature high-dome covers, tilt-up covers and automatic heat controls. Both units are completely immersible. Model 2268 is equipped with a tilt-leg to allow fats to drain off foods, and model 2258 is equipped with a french-fry basket.

A new lightweight iron (2½ lbs.) is also being introduced by Dominion. The new unit features a temperature control dial in the handle that adjusts to the right heat for different fabrics; a floating cord mount and a "stay-cool" handle with left and right thumb rests.

Finished in chrome, the new iron (model 1042) is backed by the same one-year "over-the-counter" replacement warranty that covers all Dominion products. Suggested list price is $9.95.

Dominion Electric Corp., Mansfield, Ohio.



ELECT. MERCH. 7/9/62 P. 22

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MASTERS 1958 CATALOG
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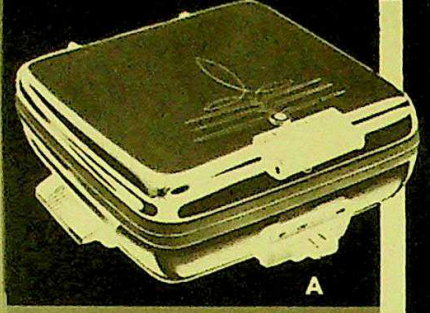
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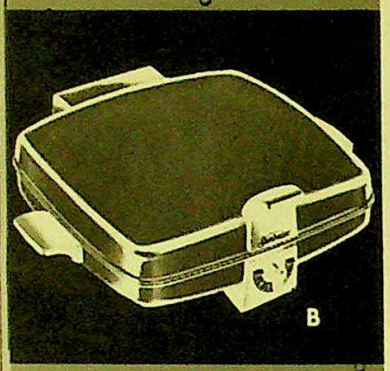
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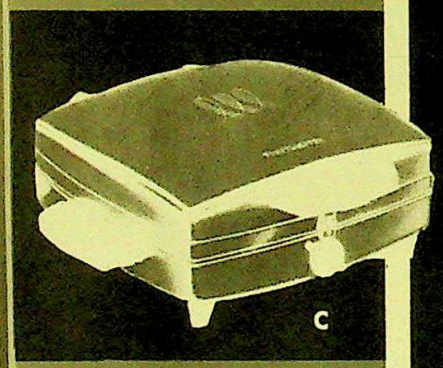
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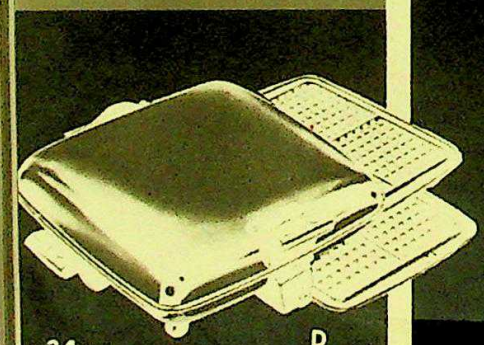

D

SMALL HOUSEHOLD APPLIANCES

A UNIVERSAL COOKAMATIC GRILLE AND WAFFLE-MAKER. Makes 4 large waffles, 12 fried eggs, grilled sandwiches. 2 sets of interchangeable grids. 1320 watts, 110-120 volts, AC.
#3805, list $29.95
2-waffle size .....**#3705, list $22.95**

B SUNBEAM WAFFLE BAKER AND GRILL. Makes 4 large waffles, sandwiches, eggs. When heat removes moisture from waffle batter and grid reaches temperature for perfect baking, thermostat shuts off current automatically. 1250 watts, 110-120 volts, AC only.
#CG, list $34.95

C TOASTMASTER GRILL AND WAFFLE BAKER. 4 waffles, hamburgers, bacon, eggs, sandwiches. Interchangeable grids for waffles and grilling. Long-life element, accurate heat control. Chrome-plated. Grid size 10⅛". 1300 watts, 110-120 volts, AC only. ....**#2D3, list $34.95**

D WESTINGHOUSE GRILL-N-WAFFLER. Toasts, fries, grills, makes 4 waffles. Automatic heat control, with signal light. Grids easily changed, without screws or bolts. Heat shield in base. Built-in overflow rim. 1200 watts, AC only.
#SGWB, list $32.95

E GENERAL ELECTRIC SANDWICH GRILL AND WAFFLE BAKER. Signal light, 6-speed temperature control. Fully automatic. Removable and reversible aluminum grids. Heat-resistant plastic handles and feet. 1100 watts, 115 volts, AC only. .....**#G42, list $21.95**

F DORMEYER GRILL-WELL. Family-size electric griddle holds 15 hamburgers. Sealed-in heating unit, thermostat in plug, Drainage channels. Completely immersible. 1500 watts, 110-120 volts, AC only. Aluminum cover, $3.00 extra. .....**#9900, list $24.95**

G PRESTO ELECTRIC GRIDDLE. Ideal for pancakes, hamburgers. Slide-out drip tray catches grease. 9" by 15". 1400 watts, 115 volts, AC. Glass cover, $2.95 extra. **#SG-33, list $16.95**

H UNIVERSAL SANDWICH GRILL AND WAFFLE MAKER. Automatic heat control and Signalite. 2 large sets of grills for waffles, frying, toasting, grilling. 1100 watts, 115 volts, AC-DC. .....**#3705, list $22.95**

I GENERAL ELECTRIC AUTOMATIC TOASTER. Snap-out crumb tray, extra-high toast lift-out. 6-position brownness control, long-life heating unit. Chrome-plated finish, heat-resistant plastic handles. 1500 watts, 115 volts, AC-DC. .....**#T82, list $18.95**

J GENERAL ELECTRIC TOAST-R-OVEN. Bakes muffins or canapes in oven "drawer" below toasting unit. Single temperature control, oven toast-in chart. Chrome-plated finish, coil plastic feet and handles. 1200 watts, 120 volts, AC only. .....**#T83, list $29.95**

K PROCTOR AUTOMATIC FAMILY TOASTER. Exclusive color guard. Reheats cold toast without burning. Snap-open crumb tray. Rustproof, completely thermostatic. 1050 watts, 110-120 volts, AC only. Family model, two-tone blue.
#1495, list $19.95
Custom model .....**#1484D, list $17.95**

L PROCTOR DELUXE AUTOMATIC TOASTER. Fully automatic. 1050 watts, 110-120 volts, AC only.
#1490, list $14.95

M WESTINGHOUSE AUTOMATIC TOASTER. Exclusive "winking" action thermostat. Precise control dial, extra-high toast lift-out. Easy-to-grasp, built-in plastic handles. Hinged crumb tray. 1320 watts, 115 volts, AC only. Chrome.
#T0-5421, list $19.95
Yellow, white, aqua or pink .....**list $21.95**

N TOASTMASTER 2-SLICE TOASTER. Toast-control knob, long-life heating element. Hinged crumb tray. Completely automatic. 1090 watts, 110-120 volts, AC only. ..**#1B22, list $23.00**

O TOASTMASTER POWERMATIC 2-SLICE TOASTER. No levers to push. Powerful electric motor lowers bread, then serves it up. Push-button crumb tray. 1080 watts, 110-120 volts, 60 cycle AC only. .....**#1B16, list $28.50**

P TOASTMASTER POWERMATIC 3-SLICE TOASTER. 1380 watts, 110-120 volts, 60 cycle AC only.
#1C4, list $39.50

Q TOASTMASTER 1-SLICE TOASTER. Wonderfully compact. Fully automatic. 550 watts, 110-120 volts, AC only. .....**#1A6, list $15.95**

R TOASTMASTER 2-SLICE TOASTER. Extra-high toast pop-up. Choice of chrome or copper plate. 1200 watts, 110-120 volts, AC only.
#1B14 list $18.95

S UNIVERSAL TOASTAMAGIC. Toasts ⅓ quicker. Adjusts to different breads and muffins. Cool handles. 1050 watt 110-120 volts, AC.
Chrome. ....**#2855, list $19.95**
Copper .....**#2866, list $22.95**

T KNAPP MONARCH POP-UP TOASTER. Extra-high toast lift. One-button control. Choice of copper or chrome finish. 1060 watts, 115 volts, AC only. .....**#22-503, list $18.95**

U SUNBEAM RADIANT CONTROL TOASTER. No levers to push. Adjusts automatically to moisture content of bread. Hinged crumb tray for easy cleaning. 1275 watts, 110-120 volts, AC only. .....**#T20, list $28.50**

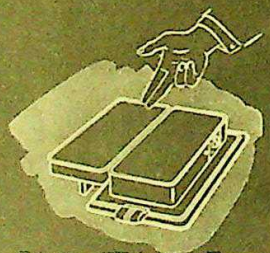
V DORMEYER POP-UP TOASTER. Reacts automatically to moisture of breads. Polished chrome body with heat-resistant plastic ends and handles. Warms toasted bread without re-toasting it. 110-120 volts, AC only.
#6303, list $19.95

W TOASTWELL 4-SLICE TOASTER. Fully automatic, pop-up toaster with quiet thermostat control. Infrared. Wide-range heat selector. Toasts all types of bread. 7" high, 6¼" wide, 15¼" long. 1290 watts, 110-120 volts.
#444-A, list $29.95

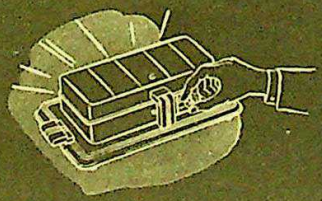
D7-352 91 Hardware Age, 10/9/47 - p. 87.

If you were the customer, you'd have little patience with a stuttering salesman like this. Today, the buyer wants facts—quickly—not alibis and uncertainty!

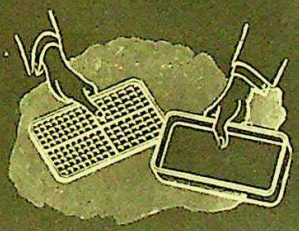
That's why—particularly when you show the Manning-Bowman Automatic Table Grill, an appliance with a lot of selling points—you'll want to feature them all...



1. Point out: "With this grill you can toast two full-size sandwiches, grill meats, fry eggs, bake waffles, and heat soups or vegetables."



2. Show customer: "By setting this dial, you regulate temperature to cook, bake or fry to taste. Light in cover glows when current is on."



3. "Comes with quick-change grill plates, frying pan, waffle grids. Heavily chrome plated, with insulated white plastic handles."

Manning Bowman Means Best

Manning, Bowman & Co., Meriden, Connecticut. In Canada: Manning, Bowman & Co. (Canada) Ltd., Oakville, Ont.
Makers of M-B quality Toasters, Percolators, Broilers, Irons, Automatic Grills, and Waffle Bakers

THE LINE THAT'S ALWAYS IN DEMAND

91
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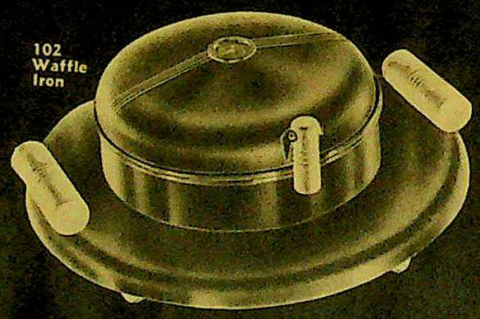
March 1940

House Furnishing Review

House Furn Review
3/40 - p. 31

For Your Spring Promotions



Can be Retailed profitably at—
Sandwich Toaster $2.69
Waffle Iron 2.98

Stock them NOW

These are just hints of Super-Lectric high quality and low prices. We are constantly bringing out new live items—all Underwriters' approved.

Send for Complete Catalogue

Superior Electric Products Corp.
Cape Girardeau, Mo.

Striking New Designs
New Low Prices

The new and distinctive design of these two Super-Lectric Matched Appliances, and the new low prices give you some unusual sales advantages—not alone for Spring selling but for all year long.

You also get the fine craftsmanship that has made Super-Lectric famous. Chromium finish, hardwood handles, removable aluminum grids —full size, heat indicator, removable cord set.

105—Sandwich Toaster

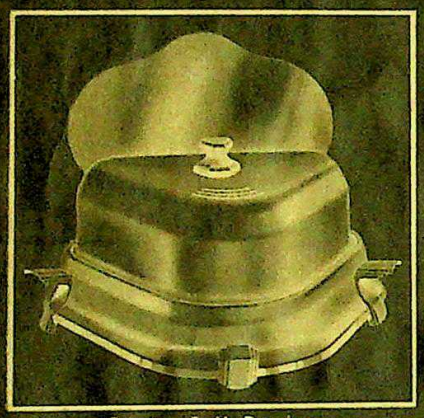
D7-352

APPLIANCES AT CHICAGO SHOWS

(Continued from page 29)

Oversize Spin Dry Washer

Finished in white, vitreous porcelain, this new spin dry washer, known as Model 220, has an oversize, dome-shaped tub of 18-gallon capacity to the water line. Wash board sides and patented quick drain bottom. Spin dryer basket is removable and manufacturers claim that it damp dries a tubful of clothes in two minutes. High center cone of the basket distributes the weight of the clothes evenly, eliminating vibration. Operated by a control that prevents lid from opening when dryer is in motion. Equipped with a 12 in. "Double Dasher", electrically welded steel frame and machine cut gears running in oil. Platinum grey trim. Retails at $109.95. Apex Rotarex Corp., Cleveland, O.



Courtesy S. H. Danziger

Combination Cooker-Roaster

This electric combination may be used as a grill, roaster, baker, cooker and boiler. Streamlined design. S. H. Danziger, 1469 Merchandise Mart, Chicago, Ill.

1938 Unit Kitchen

This 1938 model of the unit kitchen features several developments for greater flexibility, utility and beauty. Baked enamel finish over bonderized metal. All steel construction. Includes: a complete 12 in. section for greater flexibility; top storage cabinets to fit above all sizes of refrigerators; full-height broom cabinet; full-height utensil cabinet and accessories for closed-corner section treatment. Other features: automatic interior lighting of top storage cabinets; positive spring-action doors; light strips and outlets; black and-resistant porcelain work surface. General Electric Co., Cleveland, O.

Home Timer

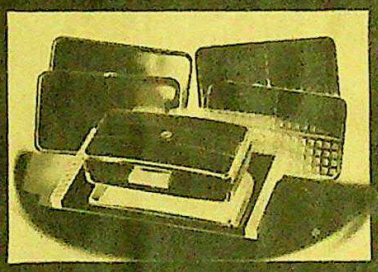
Designed to give the housekeeper accurate timing for cooking range, washing machine, radio and other household appliances and activities, this "Sessions Timer" is furnished in color combinations red, green, bronze, black, ivory or white. Two models, portable and range. In addition to taking the guess work out of cooking, assuring accurate laundering, and calling attention to the approach of a favorite radio program, it serves as a watchman for the sick room, play room and the music lesson. The Sessions Clock Co., Forestville, Conn.

Rotary Ironer

Called Priscilla, this automatic rotary ironer has a large floating 20 in. roll, well padded and covered with white removable muslin cover. Roll moves to shoe and not shoe to roll, as in other type rotary ironers. Special long-life heating element provides adequate heat over entire shoe surface. All white finish with black toe-board lacquer. Console type table with concealed casters. Fully enclosed motor never requires oiling. Knee control in addition to table top control box. Edison General Electric Appliance Corp., Chicago, Ill.

Twin-Single Tub Washers

Consisting of 8 models in both twin and single tub models, this 1938 washer line is finished in white, a new Dexter color known as "Heliotan" and conventional green. New styling. Twin tub models include "Fastwin" in white, black and chromium and "Thriftwin" in "Heliotan". Single tub models include: "Century" and "Speedex" in white; "Defender" and "Cavalier" in "Heliotan"; "Ace" and "Trump" in green. The Dexter-built wringer is featured on five of the models. Dexter Co., Fairfield, Iowa.



Courtesy Chicago Electric Mfg. Co.

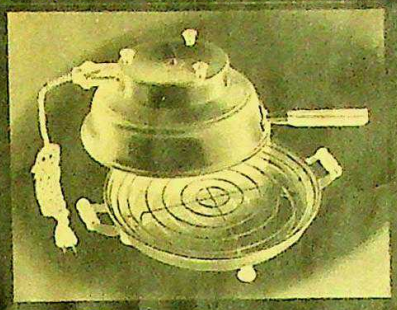
Combination Waffler & Grill

"Matchless" combination waffler and grill No. 4700-H provides smooth, flat grill plates to accommodate two full size, toasted sandwiches. Ideal for frying, grilling and making pancakes. Lever concealed in front lift handle acts as supporting leg for top when laid back. Drip cup. Cast aluminum waffle grids easily replace grill plates. Chromium finish. Heat indicator in top. Expandable hinge for thick or thin sandwiches. Natural solid walnut side rails and front handle. Heating elements in both top and bottom sections. Listed as standard by Underwriters' Laboratories. Chicago Electric Mfg. Co., 6333 W. 65th St., Chicago, Ill.

Washer and Ironer Line

Featured by a new spinner model washer and the New "Utilitop" cabinet ironer, this 1938 line includes 7 washers and 3 ironers. Known as "Whirlwind", the spinner-dryer features a simplified driving mechanism with 25 per cent fewer parts. All-white finish with metal parts "Bonderized" for permanent protection against rust and corrosion. Spinner basket is stainless steel. Six wringer models. Cabinet ironer features a compound-pivotal hinge which converts the cabinet top into readily usable shelf space. Ironer need not be moved away from the wall to open. Blackstone Mfg. Co., Jamestown, N. Y.

BROILS • FRIES • TOASTS



NEW

HIGH-LOW

"broilmaster"

This gleaming new cooking masterpiece plugs in readily, and fits comfortably on breakfast or dinner table. Completely enclosed unit not only avoids mussy spattering, but holds in the vital juices. A modern and BETTER way to cook. Display so your customers can see . . . and BROILMASTER will sell!!

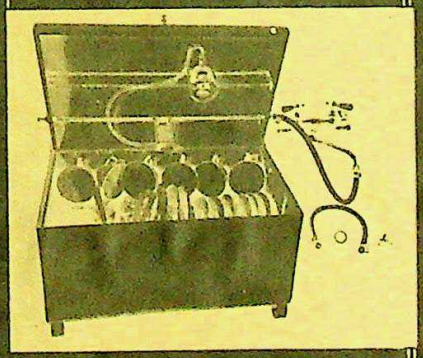
WRITE FOR DESCRIPTIVE FOLDER

Merchants and Wholesalers Are Invited to Send Inquiries at Once

Broilmaster Sales Company
693 Broadway New York City

THE HAND SAVER DISH WASHER!

AUTOMATICALLY WATER DRIVEN



The HAND SAVER DISH WASHER is compact, light, self cleaning and easy to operate. It washes dishes and silver in hot soap suds, rinses and sterilizes them. Hands never enter the water with this new and improved Dish Washer.

It takes only two to four minutes in operation and **uses no electricity—it is operated by the water that washes the dishes.** Far more economical than an electric machine and its purchase price is less than one quarter.

Here is an excellent chance for steady turnover and quick profits.
Write for our special department store merchandising plan.

TO RETAIL AT $29.50

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